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Effects of early childhood relationships and discrete major life events on basic beliefs.

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EFFECTS OF EARLY CHILDHOOD RELATIONSHIPS AND DISCRETE MAJOR LIFE EVENTS ON BASIC BELIEFS

A Thesis Presented

by

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ABSTRACT

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The purpose of this study was to examine the relation between basic beliefs on the one hand and early childhood relationships to parents and discrete major life events on the other. A total of 305 students completed usable questionnaires assessing (1) eight basic beliefs about themselves and the world, (2) parental acceptance and independence-encouragement during childhood, and (3) the experience of thirteen major life events. A questionnaire also inquired as to the age at which the event occurred and the initial and lasting effects it had on self-esteem and liking and trust of others.

Differing levels of current basic beliefs were found to be associated with the following five major life events: a major success, a significant love relationship, rejection, sexual abuse, and being the victim of a violent crime. The data consistently indicated that events have a selective impact on basic beliefs. It was also indicated that the effect of events on beliefs changes over time, and that there is a cumulative effect of multiple events. Reports of childhood relationships with parents were positively associated with all beliefs. Chlidhood relationships to parents appeared to have a buffering effect on the impact of major life events on certain basic beliefs. The implications of the results for the

development and functioning of the cognitive system are discussed.

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CHAPTER 1

INTRODUCTION

With the establishment of psychology's new cognitive paradigm, people's beliefs about themselves and the world are increasingly seen as critical, causal variables in understanding behavior (Dember, 1974; Hilgard, 1980; Sperry, 1970, 1980). The numerous specific beliefs held by any one person are believed by a number of theorists to be organized in hierarchical and interrelated networks around a few fundamental beliefs which are central to that person's personality (Epstein, 1980; Janoff-Bulman 1986; Kelly, 1955). Despite the importance of these fundamental or basic beliefs, relatively little empirical research has been done on the question of how they are formed and how they change.

The purpose of the present study was to investigate two major factors believed to contribute to individuals' basic beliefs about themselves and the world. Discrete major life events constitute the first factor that was explored. Previous research, reviewed below, has shown that major traumatic events tend to have a widespread negative effect on beliefs. However, the differential effect of specific traumas on particular beliefs has not been established. Moreover, the effect of positive discrete events, such as a major success, and lesser negative events, such as relocating has not been investigated. One goal of the present research was to explore the impact on beliefs of a broad spectrum of discrete events ranging from the most negative to the most positive.

The second goal of the research was to explore the relation of early childhood relationships to basic beliefs. Here, the literature, reviewed below, is primarily theoretical in its emphasis. Numerous authors cite the first years of life as providing the foundation for the adult personality, and most agree that relations to one's parents or primary care givers are the most significant aspect of early childhood. However there appear to be no studies which empirically explore the relation between specific kinds of early childhood relationships and beliefs held later in life. The general hypothesis tested here is that the experience of one's parents as a) accepting vs. rejecting and b) encouraging of independence vs. overprotecting has a positive effect on beliefs about oneself and the world. Whether such ongoing early experiences or the more discrete major life events have the greatest effect on present beliefs is also an important question.

A third concern addressed by this study is the interaction between particular kinds of parenting and the impact on beliefs of discrete incidents later in life. A highly supportive, encouraging experience of one's parents might be expected to provide a psychological buffer against the vicissitudes of life. However, too benign an environment early in life may not prepare one for later hardships. Analysis of the relationship between basic beliefs, on the one hand, and the interaction of relationships to parents and trauma, on the other, can provide empirical data bearing on this question.

The Nature of Basic Beliefs

The original observation that "As a man thinketh in his heart, so shall he be," is attributed to Solomon long before the birth of modern psychology. Of course he was not alone among historical figures in pondering the basic principles of human experience and behavior. From Plato to the present, many of humanity's greatest thinkers considered the same issue, and most of them took a distinctly "cognitive" approach (Bolles, 1974). Despite differences of opinion regarding whether thoughts originated in the world of spirit or experience, philosophers have traditionally seen people as acting on the basis of their thoughts. In legal as well as philosophical systems, the rational mind has been regularly identified as the root of all activities for which the individual could be held accountable. Thus, both secular and religious thinking anticipated today's cognitive emphasis in psychology by many centuries. But such an approach to understanding personality is hardly unique to specialists. Indeed, were you to ask the average person of the present or past why he or she behaved in a particular way, you would be likely to receive a highly cognitive explanation. People tend to see themselves as acting on the basis of their beliefs, and they see those beliefs to be largely rational.

One significant addition to this common sense approach to psychology was made by Kant who pointed out that we experience all the world through the lens of our own personal cognition.

"That all our knowledge begins with experience there can be no doubt. For how is it possible that the faculty of cognition should be awakened into exercise other than by the means of the objects which affect our senses, and partly of themselves produce representations, partly rouse our powers of understanding into activity, to compare, to connect, to separate these, and so to convert the raw material of our sensuous impressions into a knowledge of objects which is called experience? ...But, though all our knowledge begins with experience, it by no means follows that all arises out of experience. For, on the contrary, it is quite possible that our empirical knowledge is a compound of that which we receive through impressions, and that which the faculty of cognition supplies from itself." (quoted in Rychlak, 1981).

It is this capability of cognition to "supply from itself" that reinforces its central role in personality. If an individual believes the world is a good or a terrible place, he or she will tend to perceive it that way no matter what events may occur.

Within the psychological literature, George Kelly's Personal Construct Theory (1955) pushed the role of cognition to its logical extreme. He boldly abandoned all the traditional landmarks of both the behavioral and psychodynamic views (i.e. learning, motivation, drive, etc.) and replaced them with the single notion of individuals trying to make sense of the universe. For Kelly, people are essentially forward looking, continually generating theories of reality that will enable accurate predictions of events. Personal beliefs, or theories about the ways in which the world is put together, are part and parcel of human consciousness. The fundamental impulse of consciousness is to expand and improve this construct system.

Kelly sees beliefs as essentially dichotomous and hierarchically organized. A very fundamental or

"superordinate" construct such as "good-bad" will subsume a huge array of "subordinate" constructs such as "sweet-sour", "win-lose", and "hope-despair". Individuals proceed much like scientists - continually testing and reformulating their theories. If predictions based on certain constructs are borne out, then those constructs are retained. If however, life runs contrary to one's predictions, the relevance or validity of particular constructs needs to be reassessed. It should be clear from this that experiences that invalidate superordinate constructs are far more disorienting to the individual than experiences that invalidate subordinate constructs. The latter are easily adjusted while the former constitute the core of the personality.

Epstein (1973, 1979, 1980) maintains the central role of cognition in human personality while specifying four overlapping yet distinct tasks of the cognitive system. These are 1) to provide a means of ordering the data of experience, 2) to maintain a favorable pleasure-pain balance, 3) to maintain a favorable level of self-esteem, and 4) to create satisfactory relationships with other people. He locates personal theories of reality at a level of preconscious functioning not necessarily available to direct self report. Rather, the content of one's theory of reality is best deduced from one's behavior and emotions. Nevertheless, relevant information can be obtained by appropriate self-report questions that inquire about experientially derived self observations of emotions and behavior. Epstein also sees the postulates

of personal theories of reality to be hierarchically organized. He emphasizes that the lower order postulates are most directly tied to immediate experience (i.e. "I like ice cream.") while the higher order postulates are based on a larger collection of experiences (i.e. "I am capable of deeply appreciating life in general."). Here it is particularly easy to see that the disruption of higher order postulates is both unlikely and traumatic. Also, in the event that a higher order postulate is invalidated, those postulates beneath it become less secure.

From Epstein's theory one can generate a list of specific beliefs about oneself and the world which should be important to all people. Given the need to order reality, it follows that individuals would generate varying beliefs about the extent to which the world is indeed orderly. Some may perceive all events to be the result of certain laws or principles governing life, while others may intuitively see life as a relatively chaotic sequence of random occurrences. There are three components of this global and highly theoretical belief that are more closely tied to peoples' actual lives. These are: 1) that there is a sense of meaning and direction to one's life, 2) that one can predict and control personally important events, and 3) that one is treated fairly, i.e. it is a just world. The need to maintain a favorable balance of pleasure and pain suggests a basic belief that varies according to the degree to which the world is perceived benign versus malevolent. To

the extent one is able to experience pleasure, the world will probably be construed as benign whereas a preponderance of pain would engender a view of the world as hostile. Similarly, the need to maintain good relations with others suggests a belief that varies along a dimension of the perceived value of relating to others.

The need to maintain self-esteem is somewhat more complex. First of all, it should be clear that overall self-esteem is simply a belief that one is good. However, such a global assessment fails to distinguish the variety of ways in which we assess ourselves. Though a number of meaningful components of self-esteem have been identified, two appear to tap semi-independent, yet fundamental beliefs about our own self-worth. These are the belief in oneself as lovable and the belief in oneself as competent.

The above line of thinking produces a list of eight basic beliefs about oneself and the world the essence of which is contained in the phrases "meaning", "predictable and controllable", "justice", "benign world", "positive relations", "global self-esteem", "love-worthiness", and "competence". While these may not be the only beliefs at the core of all people's ways of thinking, what work has been done on both trauma and the cognitions behind emotions supports the notion that these beliefs are central to the ways in which most people experience life. These are the beliefs which the present study examines.

The Importance of Early Childhood Relationships for Basic Beliefs

Personality theorists have consistently cited early childhood as a critical stage in the formation of adult personality. In his famous observation that "Child is father to man," Freud summarized his view of the importance of early childhood. He believed that during the first five or six years, the nature of the adult personality was essentially formed. Failure to successfully resolve any of the various conflicts inherent in the early stages of psychosexual development are assumed to indelibly color the life ahead. Future neurotic or psychotic episodes are considered to be characterized by a regression to these incompleted steps in childhood development.

Though the neo-Freudians were more concerned with the interpersonal world of the child than the intrapsychic experience, they retained a major emphasis on the importance of early life. The basic anxiety which Karen Horney saw as the root of neurotic behavior had its basis in a child's feeling of being isolated and helpless in a potentially hostile world. Strategies developed to combat this feeling would be retained into adulthood to the extent the individual was unable to overcome the childhood experience. Sullivan (1953) was somewhat more specific in his emphasis on the importance of the child's earliest relationships primarily to the mother. He felt that the core of the self was formed through "reflected appraisals" on the part of the child as to how it was valued by

others. Primitive constructs of "good-me", "bad-me", and "not-me" would be formed as the child experienced pleasure, pain, and intolerable anxiety respectively. Around these would later be built the more complex structure of personality. Lastly, Erickson, in outlining stages of psychosocial development, concluded that such fundamental issues as trust, autonomy, and self-assertion were largely resolved within the developing person by the age of five.

From differing perspectives, theorists as divergent as Bowlby (1969), Kohlberg (1963), Skinner (1953), and Bandura (1977a) have similarly pointed to early childhood as the time in which patterns are developed which the individual tends to sustain throughout life. Also, virtually all these theorists agree that the relationship to parents is the primary experience of early childhood. However, the actual mechanisms through which basic beliefs are formed as a result of early childhood relations has received relatively little attention.

Epstein and Erskine (1983) argued that beliefs develop and change in much the same manner that scientific theories evolve - through both incremental advancements and abrupt reorganizations (Kuhn 1970). Reflecting the Kantian notion cited earlier, they emphasize that "postulates formed in early childhood are particularly important as they become higher-order postulates that influence the development of other postulates." By virtue of being there first, these childhood views have the ability to "reconstitute the world in (their) own image."

In Piaget's terms, it is perhaps an inherent, conservative preference for assimilation over accommodation that is responsible for the importance of these first beliefs.

While parent-child relations may vary along a number of dimensions, there are two general aspects of this relationship that would be expected to have profound effects on the development of the child. The first involves the degree to which the parents love and accept the child as it is. If the child experiences his or her parents as essentially loving, accepting, and willing to meet its vital needs, the world would tend to be seen as a benign place filled with people who were worth relating to. The "good-me" suggested by Sullivan would be expected to dominate the infant's gradually forming concept of self. This would provide the seed of self-esteem, particularly its "loveworthy" component. Similarly, if one experienced one's parents as responding to one's true needs as an infant, one would be more likely to come to see the world as an orderly place where things happen for good reasons. In terms of the list of beliefs generated earlier, this would support a tendency to see meaning in one's life, to see the world as a just place, and to believe that events are predictable and controllable.

Another dimension along which parents may vary is the extent to which they support and encourage independence in their children. From the child's point of view, this will necessarily involve some experience of anxiety. The over-protective parent who shields the child from this experience early in life is ill equipping the child to

cope with anxiety's inevitable appearance later on (Adler, 1927). Not surprisingly, independence-encouragement has been shown to vary somewhat independently of loving acceptance. Though the two correlate positively, the correlation is only moderately strong (r=.40), indicating that parents may favor one style over the other. The result of appropriately expressed independence-encouragement would be a sense of autonomy and competence in the child. Thus, the competence component of self-esteem would be the primary belief expected to correlate with reports of this type of parenting. However, due to the "generativity" of such fundamental postulates, independence encouragement by the parents might well make a contribution to beliefs regarding meaning, justice and other fundamental beliefs.

The Effect of Discrete Events on Beliefs

Personal theories of reality are never "finished". They are continually changing, usually incrementally, to incorporate the data of new experience. On rare occasions, however, something happens which demands a major adjustment in one's way of thinking. In such cases, the old theory simply cannot make sense of the new experience. It cannot explain what has happened, and it certainly would not have predicted the occurrence.

While the literature on responses to major life events is extensive (Wortman and Silver 1980), little of it is directly applicable to the proposed research. Empirical analyses of the effects of trauma have tended to focus on emotional states, not cognitions. Varying levels

of shock, anger and depression have been noted in individuals following rape (Kilpatrick, Veronem & Resick, 1979; McCombie, 1975; Notman & Nadelson, 1976; Sutherland & Scherl, 1970), loss of a loved one (Friedman, 1963; Schmale, 1971), and news of a life threatening illness (Achte & Vaukonen, 1971; Chesser & Anderson, 1975; Hinton, 1963; Maguire, 1978), etc. Measures of total life stress for the preceding 12 months have also been shown to correlate with anxiety and depression (Flannery, 1986).

Cognitive theories of emotion establish the link between such emotional responses and beliefs. Every emotion is seen to involve a cognitive appraisal of the situation (Averill, 1980; Epstein, 1979). For instance, anger is most frequently based on the belief that one has been wronged by others who deserve punishment. Depression expresses a belief that one is helpless in the face of important events. Seligman's learned helplessness model (1975) supports this general approach in demonstrating that repeated uncontrollable outcomes negatively affect people's beliefs about their ability to influence the world. Changes in motivation and emotion, once thought to exist in a realm separate from cognition, are seen to follow from cognitive assessments.

The general model from which this research proceeds is that events affect cognition which, in turn, affects motivation and emotion. Of course, emotions are generally understood to pass rather quickly, but the beliefs generated by specific emotional experiences may not be so transient. One largely unexplored question, which

constitutes a primary focus of this research, concerns the extent to which specific experiences have a lasting and selective influence on particular beliefs. For instance, it would be expected that the loss of a home through an earthquake would primarily affect the "benign world" belief while a similar loss through arson would impact one's belief that others are good and therefore worth relating to.

In a series of papers, Parkes (1971, 1972a, 1972b, 1975) developed a detailed picture of the ways in which major life events affect "assumptive worlds". Perhaps his major contribution was in clearly establishing the link between an inner world view and major outer events. The limitation of his research was that it focussed entirely on what Epstein would call "lower order postulates", those beliefs closely tied to specific experiences. These include belief in one's ability to walk after a leg amputation, belief in one's sustained attractiveness while ageing, and belief in one's ability to survive a life-threatening illness. Though he performed only minimal quantitative analyses, Parkes concluded that three possible types of change can occur in such beliefs. These are 1) simply putting behind the old view and moving forward into the future, 2) partial retention of previous views for as long as "reality" allows, and 3) unchanged retention of the old model alongside a new one. For the kinds of changes Parkes studied, the first strategy would appear the most appropriate, yet the latter two occur with surprising frequency. As a possible explanation for the

difficulty of making a complete change of beliefs, Parkes points out that the individual will necessarily have to grieve for the world which he or she must give up. This step in the transition process is often overlooked.

The cognitive impact of major life events has also been investigated by Janoff-Bulman in a series of papers that develop an empirical approach to the issue (Janoff-Bulman & Wortman, 1977; Janoff-Bulman, 1979, 1987; Janoff-Bulman and Frieze, 1983). For the latest study, she developed a World Assumptions Scale which measures the extent to which individuals endorse eight basic assumptions. These include beliefs in the benevolence of the world and the benevolence of people, three beliefs regarding the distribution of negative events (justice, controllability and randomness), and three beliefs about the self (self-worth, self-controlability, and luck). This scale was administered to a large sample of college students who were asked to report whether they had experienced any of the following major negative events: death of a parent, death of a sibling, incest, rape, fire that destroyed their home, or a disabling accident. Initial analyses found "remarkable consistency" between the various victim groups, so all victims were combined into one group which was then compared to the nonvictims.

Though most of the events had occurred many years earlier, three of the eight scales emerged as reliable discriminators between victims and nonvictims: self-worth, chance as a distributional principle, and the benevolence of the impersonal world. Of these three, the

victims and nonvictims differed most clearly in their ratings of self-worth, with nonvictims reporting significantly higher levels of self-esteem. Two possible explanations are offered for this difference. First, victims inevitably ask "Why me?". The "logical" response to this is "Since there is some kind of justice in the world, I must be a bad person to have such a thing happen to me." That is, "I deserved it, so I must be a bad person." The other explanation posits the existence of an infantile association between a dependable environment and a positive sense of self. It is argued children develop a positive sense of self at the same time they learn to trust their environment. The two beliefs are sufficiently embedded in one another that once the environment proves undependable, the positive sense of self may be partially abandoned as well.

In addition to general effects, Fletcher (1988) looked for differential effects of particular experiences on specific beliefs in a study of Vietnam veterans suffering from post-traumatic stress syndrome. He found strong evidence for a general negative effect on beliefs, but limited evidence for specific effects. Exposure to physical discomfort was significantly ($p<.01$) more correlated negatively with current belief in the benignity of the world (-.37) than it was with the belief in desirability of relating to others (-.22). For other experiences such as exposure to combat, uncertainty, poor leadership, etc. there were no differential effects associated with beliefs. Fletcher argues that this is not

surprising due to the high correlation between the beliefs for his sample. While such correlations would be expected for a group that had both Vietnam combat and post traumatic stress syndrome in common, it is possible that differential effects could be found in studies examining more diverse experiences in a more diverse sample.

In summary, the readily apparent effect of events on emotions has been thoroughly documented while the less obvious effect of events on basic beliefs remains largely unexplored. Theoretical work on the importance of beliefs awaits validation through empirical research. In particular, links between specific events and beliefs have yet to be established.

The Process of Assimilation

The actual process through which one integrates the data of a traumatic experience into an existing conceptual system appears to involve a sequence of periods of active grappling with the new material alternating with periods of holding it from consciousness (Horowitz, 1976, 1980). The repetition compulsion identified by Freud is easily understood when seen in this light. The individual must repeatedly try to find a way to integrate a given experience into the conceptual system. Thus, it emerges in conscious thought or the dream life again and again until some sense is made of the experience (Epstein, 1983).

Horowitz (1980) has analyzed in some detail the phases of denial and intrusion which characterize the

natural response to serious life events. "States of intrusion and of denial or avoidance do not occur in any prescribed pattern, but appear to oscillate in ways particular to each person. Nevertheless there is a phasic tendency. An initial period of outcry may occur and be followed by either denial or intrusive states, possibly in oscillation with each other. Then, in a period labeled as working through, the frequency and intensity of each of these states is reduced. When a relative baseline is reached, a period of completion is said to occur." (p. 236) The denial phase is characterized by affective numbness, avoidance of associational connections, rigidly role adherent behavior, unrealistic narrowing of attention, loss of train of thought, etc. During the intrusion phase, the individual is likely to experience pangs of emotion, rumination or preoccupation, fear of losing bodily control, intrusive ideas, bad dreams, re-enactments, etc.

The literature on coping strategies makes a distinction between the emotional consequences of an experience and active mental and behavioral responses to a crisis; the term "coping" being reserved for the latter responses (Cohen & Lazarus, 1979; Hann, 1977; Worden & Sobel, 1978). Such "coping" would appear to take place in the "working through" stage identified by Horowitz. By then the individual is presumably able to actively engage in specific efforts to integrate what has happened into his or her way of thinking and behaving. Strategies such as generating an explanation for the incident, minimizing

one's view of its importance, actively keeping it from mind, and keeping busy have been found to correlate with a more rapid recovery from rape (Burgess & Holmstrom, 1979). Blaming oneself for the event has been found to relate to poor adjustment in rape victims (Meyer & Taylor, 1986).

Horowitz's notion of a "relative baseline" signifying completion reflects the current ambiguity as to whether or not individuals ever do fully recover from major negative events. Reviewing the literature, Silver and Wortman (1980) point out that numerous theories of response to aversive outcomes propose a sequence of reactions ending in recovery (Klinger,1975; Shontz,1965; Wortman and Brem, 1975). Yet in study after study, persisting negative effects are found in a large minority of victims of misfortune a year or more after the incident (McGuire et al., 1978; Morris et al., 1977; Kaltreider, Wallace & Horowitz, 1979). Furthermore, there are scattered reports that even those who appear to recover fully may experience severe distress and disorganization at a later date (Burgess and Holmstrom, 1974; Nortman and Nadelson, 1976). These findings suggest that either the process of cognitive integration of the experience was never allowed to come to completion or that the "completion" that was achieved included a maladaptive view of one's self or the world. Such persistent negative beliefs (as well as lasting positive effects) are exactly what the present study examines.

CHAPTER 2

METHOD

Subjects

Subjects were recruited from undergraduate psychology courses at the University of Massachusetts at Amherst. They were told that the study required filling out a series of questionnaires dealing with their childhood relationships to parents, events that they may or may not have experienced, beliefs and emotions. (Data from the questionnaire that concerned emotions was not analyzed for the present study.) Questionnaires were handed out to students who indicated a willingness to participate and collected at the start of the next meeting of that class (usually two days later). Subjects received course credit for participation.

Completed questionnaires were returned by 369 students. Analysis of an eight item scale in the Basic Beliefs Inventory designed to identify subjects who were not responding conscientiously revealed that 54 subjects (about 15%) could not be counted on as supplying accurate information. A further 10 subjects were eliminated because they indicated that they had experienced every one of the 11 negative events studied - a highly unlikely possibility given the frequency distribution for reports of zero through 10 negative events. The remaining sample of 305 subjects included 196 females and 109 males. Ages ranged from 17 to 36 with nearly 80% of the subjects being 18 and 19 years of age.

Instruments

Of the four questionnaires used for the present study (see Appendix), two were constructed specifically for the study (the Personal Beliefs and Attitudes Test and the Major Life Events Inventory) and two previously existed. Answers to all of the questionnaires were recorded directly on Opscan answer sheets for computer reading of the data.

Self-Esteem.

Of the many self-esteem inventories available (reviewed by Wylie, 1969), the O'Brien-Epstein Self-Esteem Scale was chosen for its ability to differentiate separate components of self-esteem. It stands to reason that a global assessment of self-esteem is, in fact, a highly personal summation of numerous discrete evaluations. Except in times of severe depression or elation, people rarely see themselves as all good or all bad. Rather, we believe ourselves to be stronger in some areas and weaker in others. Each of these individual beliefs may be related to different life experiences. Since the goal of the present study was to identify which experiences contribute to which specific beliefs, some differentiation of the major components of self-esteem was highly desirable.

The short form of the O'Brien Epstein Scale was chosen to keep the overall task within reasonable limits of both time and attention. It contains eleven subscales assessing global self-esteem, competence, loveability, likeability, self-control, personal power, moral self-

approval, body appearance, body functioning, identity, and self-enhancement. Of these, only the global self-esteem, competence and loveability subscales were used in the data analysis. The primary reason for this was to keep the total number of beliefs being analyzed at a reasonable number. Global self-esteem was included for its obvious theoretical relevance. Competence and loveability had been shown to be somewhat independent of one another and at the same time powerful contributors to global self-esteem.

Basic Beliefs about Life in General.

From Epstein's Cognitive-Experiential Self-Theory of personality (discussed above), a number of basic beliefs, which should be important to all people's ways of thinking about themselves and the world, can be derived. These are 1) that life is meaningful and that one has a sense of direction in it; 2) that other people and the world are basically good; 3) that one is personally treated fairly by the world; 4) that close relations with others are desirable; and 5) that events in the world are generally orderly, predictable and controllable. The Basic Beliefs Inventory was constructed to measure these beliefs. Eight to twelve items were written to tap each of the beliefs, but subsequent review suggested that some items might be relevant to different beliefs for different people, and others might be too abstract to reveal anything about individual's "experiential" beliefs. Ten raters independently reviewed the items and recorded which belief they tapped and whether the item was abstract/theoretical

or personal. Items agreed upon by eight of the ten raters as being personal and belonging to a specific category were retained. The final subscales contained between five and 12 items. Alpha reliability coefficients calculated with the data of the 305 subjects used in the study ranged from .60 to .89. (See Table 1.)

The test also contains a validity scale composed of eight items, which was used to identify and eliminate inaccurate subject data. These are items such as "I can hardly ever remember speaking with a person who wore eye glasses." Ideally all subjects would score a total of 40 (five on each of the eight items) on this scale. Subjects scoring below 35 were eliminated from the data analysis.

It should be noted that the eight beliefs assessed by the two scales described above in many ways parallel the eight beliefs measured by Janoff-Bulman's World Assumptions Scale. There is, however, a difference in emphasis based on the different origins of the two scales. Janoff-Bulman began with trauma, and then sought to identify and measure the beliefs it seemed to affect. The present scale began with Epstein's Cognitive-Experiential Self-Theory, and was constructed to reflect the primary tasks of the conceptual system. Due to the experiential emphasis of Epstein's theory, personal items with emotional significance were chosen in preference to more abstract personal beliefs. Preliminary analysis showed such items to be more discriminating and more reliable than abstract beliefs.

Table 1

Subscales of the Basic Beliefs Inventory. A negative sign (-) indicates that the item is reverse-scored. Numbers show the sequence of items in the Basic Beliefs Inventory.

Meaningful World 11 items, alpha=.89

(-) 10.* I don't know what to believe anymore.
(-) 20. My life is lacking in purpose and meaning.
(-) 31. I feel that nothing matters anymore.
35. I have clear cut and interesting life goals.
45. I have a clear sense of who I am and what I want.
50. Life has meaning and purpose for me.
(-) 56. I feel like an aimless wanderer in life.
(-) 64. I don't know what I want out of life.
71. I have a clear sense of values.
75. I know where I'm going and what I want out of life.
(-) 77. I sometimes wonder whether anything is worthwhile.

Benign World 8 items, alpha=.78

1. Most people who know me consider me to be an optimistic person.
19. I have much to look forward to.
21. I am an optimistic person.
44. In general, the good things in my personal world outnumber the bad.
49. By and large I feel that my personal world is a reasonably safe and secure place.
65. The world has been good to me.
(-) 66. I view my personal, day-to day- world as a dangerous place.
(-) 78. I often feel that the world at large is a dangerous place.

Just World 5 items, alpha=.78

(-) 6. I feel I get a raw deal out of life.
(-) 12. I don't seem to get what is coming to me.
16. By and large, the world has treated me fairly.
(-) 24. I often have the feeling that the world has not been fair to me.
28. I believe I am treated fairly in my day-to -day world.

Table 1 continued

Controllable/Predictable World 6 items, alpha=.60

(-) 2. I feel that I have little control over the important events in my life.
(-) 27. I sometimes have the feeling that something terrible is about to happen to me.
(-) 48. I often feel that life is uncertain and unpredictable.
(-) 51. Most of the significant events in my life are due to factors beyond my control.
(-) 67. I often feel that I might just as well decide what to do by flipping a coin.
(-) 70. I often feel that life is so unpredictable that there is no point in planning for the future.

Relationships with Others 14 items, alpha=.82

7. There are one or more people close to me in whom I can confide.
(-) 17. I find it a burden to interact with people.
(-) 26. I find people, these days, to be more of a source of irritation than of pleasure.
(-) 30. There are few people whom I can really trust.
37. If I were in trouble, I would not hesitate to ask for help from others.
38. I like people and believe in giving them the benefit of the doubt.
(-) 41. I can no longer trust people the way I used to.
(-) 42. I often feel lonely and isolated from people.
(-) 52. I find it hard to be close to anyone.
55. I believe most people can be trusted.
(-) 60. Most people either can't or won't help you when you need them most.
62. There are some people I feel very close to.
(-) 68. I feel my personal problems have been caused by others.
79. I enjoy the company of others.

Early Childhood Relationships.

Assessing the nature of early childhood relationships is a difficult task. Barring a longitudinal study, one must accept the limitations of retrospective data. The relevance of those limitations to the present study will be thoroughly discussed following the presentation of the results. Suffice it for now to say that construct validity for the scale that was used (the Mother-Father-Peer Scale) was previously established by the coherent relations it produced with other tests. Furthermore, in a study by Ricks (1985), the scale demonstrated the transmission of parenting styles across generations.

The Mother-Father-Peer Scale (MFP) asks subjects to report on their memory of the ways their parents and peers related to them during childhood. On a five point Likert scale ranging from "strongly disagree" to "strongly agree" subjects respond to items such as "When I was a child my mother/father encouraged me to make my own decisions." Ratings are derived for the extent to which one's mother was 1) independence encouraging versus over-protecting, and 2) accepting versus rejecting. The same scales are scored for the father. For peers, only an acceptance-rejection score is derived. Reliability coefficients of the subscales range from .82 to .93 (Epstein, 1983).

Major Life Events.

A Significant Events Inventory was developed to inquire as to whether or not subjects experienced a particular event, and if so, to explore its immediate and lasting effects. For both immediate and lasting effects,

subjects are asked to rate the event's impact on self-esteem and liking and/or trust of others. The subject's age group at the time of the event (ages 0-5, 5-12, 12-14, 14-18, 18 or over) is also recorded. This sequence was repeated for 13 different events ranging from "an intense, positive love relationship" to being the victim of a violent crime.

Procedure

As indicated above, questionnaires were distributed and collected in two successive psychology classes. No sequence in which the questionnaires should be filled out was specified, but most subjects appeared to fill them out in the following order: Major Life Events, Basis Beliefs, Emotions (not analyzed), Self-esteem, and Childhood Relationships. The total time required to complete the questionnaires was roughly 90 minutes. Students who failed to bring the questionnaires to class on the collection day were allowed to return completed questionnaires to a department office.

CHAPTER 3

RESULTS

Means, standard deviations, and internal-consistency reliability coefficients (coefficient alpha) for the eight belief scales and the two scales measuring relationships with parents are presented in Table 2. The reliability coefficients for the eight beliefs ranged from .60 to .89 with a median of .78. The most reliable were Meaningful World (.89), Global Self-esteem (.85), and Desirability of relationships (.82). The least reliable were Predictable and Controllable World (.60) and Competence (.68). The two measures of childhood relationship to parents were highly reliable: Parent Acceptance, .91, and Independence-Encouragement, .86.

Factor analysis of the eight belief scales showed that all contributed to a single favorability factor. An internal reliability coefficient (coefficient alpha) of .94 was obtained when all items from the eight were combined into a single "Favorability of Beliefs" scale. When the original eight belief scales were correlated with one another, correlations ranged from .09 to .63 with a median of .41. Their correlations with the Favorability of Beliefs scale ranged from .45 to .84 with a median of .69 (See Table 3).

Table 4 presents data on the number of subjects who reported experiencing each event. Both of the positive events occurred more frequently than any of the negative events. In most cases, about the same percentage of males and females reported experiencing a given event. However,

Table 2

Data on the scales measuring beliefs and relationships to parents.

Scale	Number of Items	Mean	Standard Deviation	Reliability Coefficient
Meaningful World	11	44.19	6.55	.89
Benign World	8	32.20	3.63	.78
Just World	5	19.32	2.68	.78
Predictable, Controllable Wld.	6	21.65	3.10	.60
Relationships	14	56.10	6.50	.82
Global Self-Esteem	6	19.53	3.95	.85
Competence	6	21.72	3.18	.68
Loveworthiness	7	24.76	4.85	.74
Parent Acceptance	21	85.62	12.64	.91
Independence-Encouragement	26	98.92	13.54	.86

Table 3

Correlations among belief scales.

	Meaning	Benign World	Justice	Pred., Cont.	Relationships	Global S.-E.	Competence	Loveworthiness
Benign World	.62							
Justice	.41	.60						
Predictable Controllable	.64	.51	.40					
Relationships	.52	.59	.52	.45				
Global Self-Esteem	.51	.52	.35	.36	.32			
Competence	.37	.24	.09	.21	.18	.42		
Love-Worthiness	.43	.45	.32	.26	.51	.47	.18	
Favorability	.84	.81	.64	.68	.78	.70	.45	.66

Note: All correlations are significant at the .001 level with the exception of the Competence x Justice correlation which is not significant. N=300±.

Table 4

Frequencies of Incidents of the 13 events studied.

Event	Number Reporting	Percentage Reporting	% of males Reporting	% of females Reporting
Major Success	241	79	83	77
Love Relat.	222	73	73	74
Death of Someone Close	203	67	66	67
Move	154	50	47	51
Rejection	149	49	49	50
Immoral Act	139	46	55	40
Victim of Non-violent Crime	86	28	42	22
Parental Divorce	67	22	18	13
Accident, Other's Responsibility	57	19	22	17
Accident, Own Responsibility	44	14	5	18
Sexual Abuse	43	14	18	13
Victim of Violent Crime	24	8	13	5
Natural Disaster	15	5	4	6

a higher percentage of males reported engaging in an immoral (55% vs 40%; chi square =9.49, $p<.01$) and being the victim of both a violent crime (13% vs 5%; chi square =6.41, $p<.05$) and a nonviolent crime (42% vs 22%; chi square =13.71, $p<.01$). A higher percentage of females reported incidents of sexual abuse (18% vs 5%; chi square =11.60, $p<.01$). Table 5 shows the ages of the subjects at the time of the events.

Presentation of the results is divided into three sections: the effect of individual events on beliefs, the effect of multiple events on beliefs, and the relation with beliefs of the perceived intensity of events and the age at which they occurred. In each of these sets of analyses, the contributions to beliefs of gender and relationships to parents are considered.

Individual Events

Relation of ratings of current basic beliefs to experience of specific positive and negative events

The overall pattern of beliefs of those who did and did not report experiencing each of the 13 events was compared in a series of MANOVAs. (See Table 6.) The multivariate tests in which the eight beliefs were the dependent variables showed significant differences ($p<.05$) between those who did and did not report experiencing a major success, a significant love relationship, a painful rejection, sexual abuse, and a violent crime. No significant differences were found in the multivariate tests comparing the pattern of beliefs of those who did and did not report experiencing a move, a death, commit-

Table 5

Frequency distribution of ages of subjects at the time of events.

Event	Age Groupings						
	0 - 5	5 - 12	12 - 14	14 - 18	18 or over	Mean Age	S. D.
Move	14	52	25	23	47	12.8	5.30
Death	8	50	27	95	25	13.6	4.18
Major Success	0	14	26	181	18	15.5	2.16
Rejection	2	5	3	106	33	16.2	2.55
Love	0	2	3	138	80	17.0	1.71
Immoral Act	6	22	22	70	20	14.2	4.03
Parental Divorce	13	25	15	9	8	10.5	5.20
Accident, Own Resp.	5	3	3	27	7	14.3	4.90
Accident, Other's Resp.	3	6	10	28	8	14.3	4.10
Sexual Abuse	5	15	3	13	5	11.8	5.22
Violent Crime	2	2	6	11	3	13.9	4.42
Non-violent Crime	2	8	19	46	9	14.6	3.30
Natural Disaster	6	5	3	3	2	9.6	5.98

Table 6

Levels of significance of two tests comparing beliefs of subjects reporting and not reporting each event.

	MANOVA Signf. of Multivariate F	Significance of Univariate F-test for overall Favorability Factor
Move	.64	.85
Death	.44	.43
Major Success	.01	.01
Rejection	.03	.02
Love	.02	.001
Immoral Act	.37	.06
Parental Divorce	.72	.77
Accident, Own Resp.	.41	.05
Accident, Other's Resp.	.88	.51
Sexual Abuse	.03	.01
Violent Crime	.01	.28
Non-violent Crime	.95	.75
Natural Disaster	.07	.80

ting an immoral act, parental divorce, an accident that was one's own responsibility, an accident that was another's responsibility, a non-violent crime, and a natural disaster. Of this later group, parental divorce in particular was expected to be significantly associated with beliefs due to the presumed importance of the event and the large number of subjects who reported it. However, neither the multivariate test nor any of the univariate tests comparing the individual beliefs of the two groups showed a significant difference between those who did and did not report experiencing parental divorce.

Subjects who experienced each event were also compared to subjects who had not on the overall favorability of beliefs score, which was calculated by adding the scores on each of the eight individual beliefs. As shown in Table 6, the results of these tests were slightly different form the MANOVAs. Four of the events which had produced significant results on the MANOVAs, major success, love, rejection, and sexual abuse, produced significant and slightly more reliable results in this comparison. However, violent crime did not produce a significant difference on the general score.

Each of the events that produced significant results in the MANOVA, was associated with three or more significant differences in univariate f-tests suggesting that the effects of events on beliefs are rarely confined to a single belief. (See Table 7.) The two positive experiences were both associated with significant differences in five of the eight beliefs. Those reporting

Table 7

Mean levels of beliefs of those reporting (top) and not reporting (bottom) each event. Differences between means were assessed using univariate F-tests.

	Basic Beliefs							
Event	Meaning	Benign World	Justice	Pred., Cont.	Relationships	Global S.-E.	Competence	Loveworthiness
Move	44.30	32.00	19.39	21.63	56.43	19.36	21.25	24.57
	44.16	32.45	19.37	21.79	56.28	19.65	21.92	25.03
Death	44.44	32.16	19.44	21.67	56.78	19.85	21.83	24.88
	43.84	32.36	19.28	21.78	55.52	19.36	21.58	24.64
Major Success	44.66*	32.45*	19.46	21.92*	56.66	19.78*	22.15*	24.93
	42.68	31.40	19.10	20.94	55.24	18.48	20.26	24.32
Rejection	43.67	31.66**	18.95**	21.21**	55.69	18.99*	21.94	24.41
	44.76	32.77	19.80	22.19	57.00	19.99	21.57	25.18
Love	44.75*	32.44	19.55	21.83	57.00**	19.89**	22.02*	25.38**
	42.81	31.62	18.91	21.38	54.55	18.43	21.00	23.18
Immoral Act	43.96	31.93	19.09	21.47	55.53*	19.31	21.52	24.40
	44.47	32.48	19.63	21.91	57.55	19.66	21.94	25.14
Parental Divorce	44.09	32.17	19.03	21.41	55.88	19.88	22.05	24.67
	44.27	32.24	19.48	21.79	56.49	19.40	21.67	24.89
Accident, Own Resp.	43.20	30.90*	18.54*	21.00	55.02	18.66	21.71	23.93
	44.40	32.44	19.52	21.84	56.57	19.64	21.75	24.94
Accident, Oth's resp.	44.51	32.71	19.42	21.49	56.80	19.75	21.85	25.33
	44.17	32.11	19.37	21.76	56.25	19.44	21.72	24.68
Sexual Abuse	42.48	31.00*	18.52*	20.29**	54.55*	18.40*	22.07	23.24*
	44.53	32.43	19.53	21.95	56.66	19.69	21.69	25.20
Violent Crime	44.83	31.93	18.30*	22.04	53.52*	19.08	22.57	22.00**
	44.18	32.25	19.47	21.69	56.60	19.54	21.68	25.04
Non-violent Crime	44.02	32.21	19.48	21.84	56.10	19.49	21.73	24.26
	44.31	32.23	19.34	21.66	56.45	19.50	21.76	25.01
Natural Disaster	46.23	32.54	18.15	20.77	54.23	19.85	22.00	24.54
	44.14	32.21	19.44	21.75	56.45	19.49	21.74	24.81

* p<.05; ** p<.01

a major success reported significantly more favorable beliefs than those who did not at the .05 level regarding Meaning, Benign World, Predictable and Controllable World, Global Self Esteem, and Competence. Subjects who reported a significant love experience reported more favorable beliefs than those who did not ($p<.01$) in Global Self-esteem, Desirability of Relationships, Love-worthiness, and ($p<.05$) in Meaning and Competence.

Among the negative events, sexual abuse and rejection were the events most often significantly associated with changes in beliefs. Victims of sexual abuse were significantly less positive than nonvictims in five of the eight beliefs: Benign World, Justice, Global Self-esteem, Love-worthiness, and Predictable and Controllable World. Those reporting rejection had less favorable beliefs than those not reporting a rejection in all of these same beliefs with the exception of Love-worthiness on which they did not differ significantly. Victims of a violent crime were less positive than nonvictims in their beliefs regarding Justice, Love-worthiness, and Relationships.

Overall, univariate tests comparing individual beliefs of those who reported having and not having each of the events revealed significant differences ($p<.05$) on 25 of the 104 comparisons, which is considerably more than the five that would be expected by chance. In every case, the significant differences were in the expected direction: those reporting having experienced a positive event reported more positive beliefs than those who reported not having the experience, and those reporting

having a negative event reported less positive beliefs than those who reported not having the experience.

Six events (major success, love, sexual abuse, rejection, violent crime, and an accident that was one's own responsibility) that produced at least two significant correlations with beliefs were labeled "major events" and examined in greater detail in subsequent analyses. The other seven events, all of which produced either one significant difference or none at all in univariate comparisons, were labeled "minor events". As will be shown later, even their cumulative effect on beliefs was not significant.

A final finding of interest in Table 7 is that some current beliefs were most strongly associated with the occurrence of positive events while others were most strongly associated with the occurrence of negative events. Significant differences in Meaning and Competence were associated only with the occurrence of the two positive events (love and a major success). In contrast, significant differences in Just World were associated only with the occurrence of the four negative events.

Ratings of immediate and lasting effects of events on beliefs

Further evidence of the association between certain events and certain beliefs was revealed through a second approach to the question of the relation between events and beliefs. For every event that a subject reported having experienced, ratings were made of the initial and lasting effect of the event on self-esteem and on liking

and trust of others. The scale ranged from a "strong negative effect" (-2) to a "strong positive effect" (+2) with "0" indicating neither a positive nor a negative effect.

In Table 8a it can be seen that subjects reported that every event except a natural disaster had significant effects on their beliefs. The events for which subjects reported the strongest initial effect on self-esteem were the positive events, major success and love, followed by rejection, sexual abuse, and committing an immoral act. The events for which subjects reported the strongest initial effects on liking and trust of others (in order of decreasing magnitude) were nonviolent crime, sexual abuse, violent crime, love and rejection. When the initial effect of each event on self-esteem was compared to the initial effect on liking and trust of others, the reported effect on self-esteem was significantly stronger ($p<.05$) for death, major success, rejection, love, immoral act, and an accident that was another's responsibility. The reports of the effect on liking and trust of others were significantly stronger than the reports of effects on self-esteem for violent crime and nonviolent crime. For only five events (move, divorce, sexual abuse, natural disaster, and an accident that was another's responsibility) was there no difference between reported effects on beliefs regarding oneself and beliefs regarding others.

Comparison of the two reports regarding the lasting effects of each event showed a significant difference between effects on self-esteem and effects on liking and

Table 8a

Mean ratings of the initial and lasting effects of events on self-esteem and liking and trust of others. Asterisks next to means indicate significance level of t-tests comparing means to a population with a mean of zero. Asterisks next to t values indicate significance level of t-tests comparing effects on self-esteem to effects on liking and trust of others.

	n	Initial Effect on self-esteem	Initial Effect on liking and trust of others	t	Lasting Effect on self-teem	Lasting Effect on liking and trust of others	t
Move	154	-.17*	-.04	-1.96	.59**	.25**	5.16**
Death	203	-.50**	-.11*	-7.15**	.07	.06	.32
Major Success	241	1.45**	.60**	15.74**	1.00**	.38**	13.61**
Rejection	149	1.38**	-.85**	-8.22**	-.22**	-.30**	1.21
Love	222	1.43**	1.07**	7.81**	1.08**	.77**	5.67**
Immoral Act	139	1.13**	-.43**	-9.40**	-.34**	-.20**	-2.33*
Parental Divorce	67	-.54	-.62	.87	.14	-.22**	5.07**
Accident, Own Resp.	44	1.04**	-.24*	-5.69**	-.24*	.02	-3.08**
Accident, Other's Resp.	57	-.34**	-.37**	.70	.02	-.09	.85
Sexual Abuse	43	1.24**	-1.24**	.00	-.57**	-.76**	2.28*
Violent	24	-.46**	-1.17**	2.13**	-.04	-.54**	3.61**
Non-violent Crime	86	-.93**	-1.27**	7.57**	-.09*	-.44**	9.05**
Natural Disaster	15	-.21	-.11	-1.00	.10	.05	1.00

* p<.05; ** p<.01.

trust of others for nine of the 13 events. In the case of 5 events (major success, love, committing an immoral act, move, and an accident that was one's own responsibility), the reported effect on self-esteem was significantly greater than the reported effect on liking and trust of others. For three events (sexual abuse, violent crime, and nonviolent crime) the reported lasting effect on liking and trust of others was greater than the reported effect on self- esteem. In the case of parental divorce, the reported lasting effects were in opposite directions: The lasting effect on self- esteem averaged .14 while the lasting effect on liking and trust of others averaged -.22. For the remaining four events (death of a loved one, accident that was another's responsibility, natural disaster, and rejection) no significant differences were found, but it should be noted that for every event in this group except rejection virtually no lasting effect was reported for either belief. Thus, from this approach to measuring the effect of events on beliefs, there is strong support for the hypothesis that specific events have differential effects on particular kinds of beliefs, both immediately and in the long run.

A second way in which this data concurs with the previous data regards the magnitude of the lasting effect of different events. When the absolute values of the mean lasting effects on beliefs about self and others were added to create a single measure of the size of the total lasting effect, love, major success, and sexual abuse had far and away the largest values (1.85, 1.38, and 1.33

respectively versus a next closest total of .84). The same three events were also associated with the greatest changes in beliefs according to the earlier method.

A final finding regarding the effect of events on beliefs (uniquely available from this second approach) is that the effect size generally diminishes over time. (See Table 8b.) With regard to effects on self-esteem, significant differences (t-tests, $p<.01$) were found between initial and lasting effects for every event except natural disaster. In the case of a move, the change was from a slightly negative significant initial effect to a moderately positive significant lasting effect. In the case of death of someone close and parental divorce, the change was from a moderately negative significant initial effect to a slightly positive nonsignificant lasting effect. For every other event, which includes positive and negative events, the direction of the reported effect did not change, but the size of the effect diminished significantly over time.

The same kinds of changes were reported between initial and lasting effects on liking and trust of others. For every event other than a natural disaster and an accident that was one's own responsibility, significant differences ($p<.01$) were reported. In the case of move, the direction of the effect changed from a nonsignificant initial negative effect to a highly significant lasting positive effect. For every other event, the direction stayed the same, but the size of the effect diminished, although it remained significant in all cases except

Table 8b

Comparison of the reported initial vs. lasting effects of events on self-esteem and liking and trust of others.

	n	Self-Esteem initial effect	Self-Esteem lasting effect	Self-Esteem t	Liking and Trust of Others initial effect	Liking and Trust of Others lasting effect	Liking and Trust of Others t
Move	154	-.17	.59	-9.20**	-.04	.25	-3.59**
Death	203	-.50	.07	-9.08**	-.11	.06	-3.74**
Major Success	241	1.45	1.00	8.90**	.60	.38	5.24**
Rejection	149	-1.38	-.22	-16.98**	-.85	-.30	-7.34**
Love	222	1.43	1.08	6.59**	1.07	.77	6.22**
Immoral Act	139	-1.13	-.34	-8.81**	-.43	-.20	-4.13**
Parental Divorce	67	-.54	.14	-6.00**	-.62	-.22	-3.86**
Accident, Own Resp.	44	-1.04	-.24	-7.09**	-.24	.02	-2.29**
Accident, Oth's Resp.	57	-.34	-.02	-3.14**	-.37	-.09	-4.33**
Sexual Abuse	43	-1.24	-.57	-4.17**	-1.24	-.76	-3.03**
Violent Crime	24	-.46	-.04	-5.57**	-1.17	-.54	-3.88**
Non-violent Crime	86	-.93	-.09	-6.12**	-1.27	-.44	-8.09**
Natural Disaster	15	-.21	.10	-1.84	-.11	.05	-1.14

* p<.05; ** p<.01

accident that was one's own responsibility and accident that was another's responsibility. Natural disaster produced no significant effect at either period, which can be attributed, in part, to its low frequency of occurrence.

Reports of early childhood relationships as related to basic beliefs

Correlations between the eight basic beliefs and reports of Parent Acceptance and Independence-Encouragement are shown in Table 9. Fifteen out of the 16 correlations are significant at the .01 level. For these 15, the median correlation is .29. In every case, increased levels of Parent Acceptance and Independence-Encouragement are associated with more positive beliefs.

It can be seen in Table 9 that the two parental relationship variables tended to correlate similarly with most of the beliefs. (The correlation between Parent Acceptance and Parent Independence-Encouragement equalled .49.) However, there are two important exceptions to this pattern. One is that Love-worthiness produced an exceptionally high correlation with Parent Acceptance ($r=.52$), and a significantly lower correlation with Independence-Encouragement ($r=.34$). The difference between these correlations is significant at the .01 level. Competence, on the other hand, was more strongly associated with Independence-Encouragement than with Love-worthiness ($r=.15$ vs $r=.03$; $p<.05$).

Table 9.

Correlations between basic beliefs and Relationship-to-Parent variables.

	Basic Beliefs							
	Mean-ing	Benign World	Just-ice	Pred., Cont.	Relation ships	Global S.-E.	Compe-tence	Lovewor-thiness
Parent Acceptance	.32	.28	.29	.28	.36	.27	.03	.52
Independence Encouragement	.24	.30	.33	.24	.32	.26	.15	.34

Note: All correlations are significant at the .001 level except Parent Acceptance x Competence (n.s.) and Independence-Encouragement x Competence ($p < .01$). $N = 300\pm$.

Relative contributions of major events, relationships to parents, and gender to beliefs

Regression analyses were performed to determine the extent to which major events, relationships to parents, and gender contributed independently and in interaction with each other to the eight beliefs. In each analysis, one of the basic beliefs was the dependent variable. Hierarchical analyses were employed in which the order of the independent variables was controlled, but only those variables were retained which were significant. The variables were entered in the following order: 1) gender, 2) parental acceptance and parental independence-encouragement, 3) the occurrence or non-occurrence of an event, and 4) the two-way interactions between all main effects. (For all regression analyses, reports of having had a particular experience were assigned a value of "1", and reports of not having had the experience a "0". Whenever two highly correlated ($r \geq .70$) variables appeared in the final equation, the analysis was rerun without the variable accounting for the smaller amount of the variance. Also, due to the high number of interactions that were calculated, only those significant at the .01 level were retained. Main effects significant at the .05 level were accepted as significant.)

The results of the the regression analyses are presented in Table 10. In reading Table 10, it should be remembered that for each belief, six regression equations were calculated, one for each of the major events. Whenever Parent Acceptance, Independence-Encouragement, and

Table 10

Specific effects in regression equations associated with specific beliefs. Entries are standardized regression coefficients.

	Gender	Parent Relationship Acceptance	Relationship Indep.-Encur.	Event	r square
Meaning		.32**			.10
Benign World		.19**	.26**		.14
Justice		.19**	.26**		.15
Predictable Controllable		.20**	.15*	rejection -.14*	.12
Relation-ships	.11*	.29***	.21***	love .11*	.20
Global Self-Esteem		.26***	.18**		.12
Competence	-.16**		.16**	major success .23*** love .13*	.04
Love-Worthiness	.16**	.54***		love .13*	.32

* p<.05; ** p<.01; *** p<.001

gender contributed to a belief, they did so regardless of which event was included in the calculation. Thus, when these variables appear in Table 10, it signifies a contribution to a belief that is independent of life events. When an event is indi cated in Table 10, it was a contributing variable in an equation, it will be recalled that did not include any other event.

Relationship to parents accounted for the greatest share of the variance in the case of every belief except competence, where gender was equally important, with males reporting higher levels of competence. Both Parent Acceptance and Parent Independence-Encouragement were significantly associated with five of the eight beliefs. Since the simple correlations between each of these beliefs and the two relationship to parent variables were very similar, no significance should be attached to the small differences in their standardized regression coefficients. In this same vein, the absence of Independence-Encouragement in the equations for Meaning and Love-worthiness should be interpreted with caution. Parent Independence-Encouragement was highly reliably associated with both Meaning ($r=.24$, $p<.001$) and Love-worthiness ($r=.34$, $p<.001$) even though it was not retained in the regression equation. Only in the case of Competence was one parent relationship variable, Independence-Encouragement, clearly associated with the belief while the other, Parent Acceptance, was not. Sex contributed significantly to the equations for Competence, Love-worthiness, and the Desirability of Personal

Relationships. Self-reported Competence was higher for males and self-reported Love-worthiness and Desirability of Relationships were higher for females.

Holding parental relationships constant, events made relatively infrequent and weak contributions to beliefs. However, the fact that events appeared at all in these equations is of interest. One might expect the other independent variables, gender and years of relationships with parents, to have far more effect on basic beliefs than any single event. Positive associations were found between a major success and both Competence and the belief in the world as benign. Significant love relationships were positively associated with Competence, Love-worthiness, and Desirability of Relationships. Sexual abuse and rejection were negatively associated with the belief that events are predictable and controllable.

Multiple Events

To assess the cumulative effect of events, counts were made of the number of the various kinds of events subjects reported experiencing. The six major events, as previously identified, were separated into two positive events and four negative events. The remaining seven events were grouped as "minor negative events". A "Favorability of Major Events" score was also computed by subtracting the number of major negative events from the number of positive events. (Frequencies for each of these categories are shown in Table 11.) Each of the totals was then correlated with beliefs. (See Table 12.)

Table 11

Frequencies for cumulative counts of discrete events.

count	mild negative	major negative	positive
0	28	122	19
1	98	125	107
2	101	45	179
3	50	7	n.a.
4	23	6	n.a.
5	5	n.a.	n.a.
6	0	n.a.	n.a.

Favorability of Major Events Score:
Number of positive events minus number
of negative events.

count	Score
-4	0
-3	2
-2	6
-1	22
0	99
1	107
2	69

Table 12.

Correlations between cumulative counts of events and beliefs.

Count	Basic Beliefs							
	Meaning	Benign World	Justice	Pred., Cont.	Relationships	Global S.-E.	Competence	Lovewortheiness
Major Negative	-.09	-.19***	-.24***	-.17**	-.16**	-.15**	.07	-.17**
Major Positive	.18**	.14*	.08	.13*	.17**	.20***	.26***	.17**
Favorability of Major Events	.19***	.26***	.26***	.23***	.25***	.25***	.10	.26***

* p<.05; ** p<.01; *** p<.001 N=300±

The number of minor negative events produced no significant correlations with beliefs. Number of major negative events produced highly reliable negative correlations with every belief other than Meaning and Competence. Interestingly, competence was the belief most strongly correlated with the number of good events. Number of good events correlated significantly positively with every belief except Justice, the belief most strongly correlated with the number of negative events. This contrast added further support to the earlier conclusion (Table 7) that certain beliefs are particularly strongly associated with negative events and others with positive events.

The strongest and most consistent correlations with beliefs were produced by the Favorability of Major Events Score. For every belief except Competence, the correlation with this score was stronger than either the correlation with the number of major negative events or the correlation with the number of positive events. Thus, the favorability of major events score provides the strongest assessment of the cumulative effect of discrete life experiences.

A set of regression equations similar to those described above were calculated using the Favorability of Major Events Score in place of the occurrence or non-occurrence of a single event. Once again, the eight beliefs were the dependent variables, and the independent variables were gender, Parent Acceptance, Parent Independence-Encouragement, Favorability of Major Events

Score, and the two-way interactions between the main effects. A hierarchical procedure was employed using the same order and criteria for inclusion as described earlier. The results of these analyses are presented in Table 13.

Once again the relationship to parents variables figured prominently in all the equations, but this time the Major Events Score or its interaction with Parent Acceptance appeared in the equation for every belief except Competence. Unlike previous regression analyses with a single event, the Major Events Score had a standardized regression coefficient and a level of significance of roughly equal magnitude to the relationship-with-parents variables. The Favorability of Major Events Score contributed positively to the following beliefs: Benign World, Just World, Desirability of Relationships, Global Self-esteem, and Love-worthiness. The contributions of Parent Acceptance, Independence-Encouragement, and gender were the same as they were in the regression equations with single events.

While all the main effects were in the expected direction, examination of the two significant interactions revealed less obvious effects. The interaction of Parent Acceptance and the Favorability of Major Events Score made a significant contribution to the beliefs in Meaningful World and Predictable-Controllable World. Division of the subjects into a high Parent Acceptance group (n=149, mean=95.3) and a low parent acceptance group (n=156,

Table 13

Results of multiple regression equations using gender, Parent Acceptance, Independence-Encouragement, Favorability of Major Events Score (FMES), and all two-way interactions.

Dependent Variable	Variables in the equation (standardized regression coef.)	r squared
Meaningful World	Parent Acceptance (.27)*** FMES x Parent Acceptance (.16)**	.12
Benign World	Independence-Encouragement (.23)*** Parent Acceptance (.14)* FMES (.19)***	.18
Just World	Independence-Encouragement (.24)*** Parent Acceptance (.14)* FMES (.18)**	.18
Predictable Controllable	Parent Acceptance (.15)* Independence-Encouragement (.13)* FMES x Parent Acceptance (.21)***	.13
Relationships	Gender (.21)* Parent Acceptance (.25)*** Independence-Encouragement (.20)** FMES (.15)**	.22
Global Self-Esteem	Parent Acceptance (15)* Independence-Encouragement (.14)* FMES (.19)**	.13
Competence	Gender (-.16)** Independence-Encouragement (.16)**	.04
Love-Worthiness	Gender (.16)*** Parent Acceptance (.51)*** FMES (.12)*	.33

* p<.05; ** p<.01; *** p<.001

mean=76.4) revealed the source of the interactions, shown in Figures 1 and 2.

The important finding from these figures is that for the high Parent Acceptance group, the correlations between the Favorability of Major Events Score and both Meaning and Predictable-Controllable were positive and highly significant ($r=.34$, $p<.01$ and $r=.30$, $p<.01$ respectively), whereas for the low Parent Acceptance group, the correlations were close to zero and not significant ($r=.01$ and $r=.12$ respectively).

The values of r-squared for the eight beliefs (rank ordered) were as follows: Loveworthiness, .33; Relationships with others, .22; Benign World, .18; Just World, .18; Global Self-esteem, .13; Predictable and Controllable World, .13; Meaningful World .12; and Competence, .04. Interestingly, this list appears to run from those beliefs pertaining specifically to relationships to those beliefs pertaining more to achievements. This suggests that the independent variables investigated were generally more strongly associated with beliefs regarding relationships than with beliefs regarding achievements.

Differences in Beliefs as a Function of Intensity of an Event and Age at Occurrence

Effect on beliefs of reported intensity of the event

As explained earlier, subjects were asked to report the initial effect of each event they experienced on both their self-esteem and their liking and trust of others. The scale ranged from "strong negative effect" (-2) to "strong positive effect" (+2) with "0" indicating neither

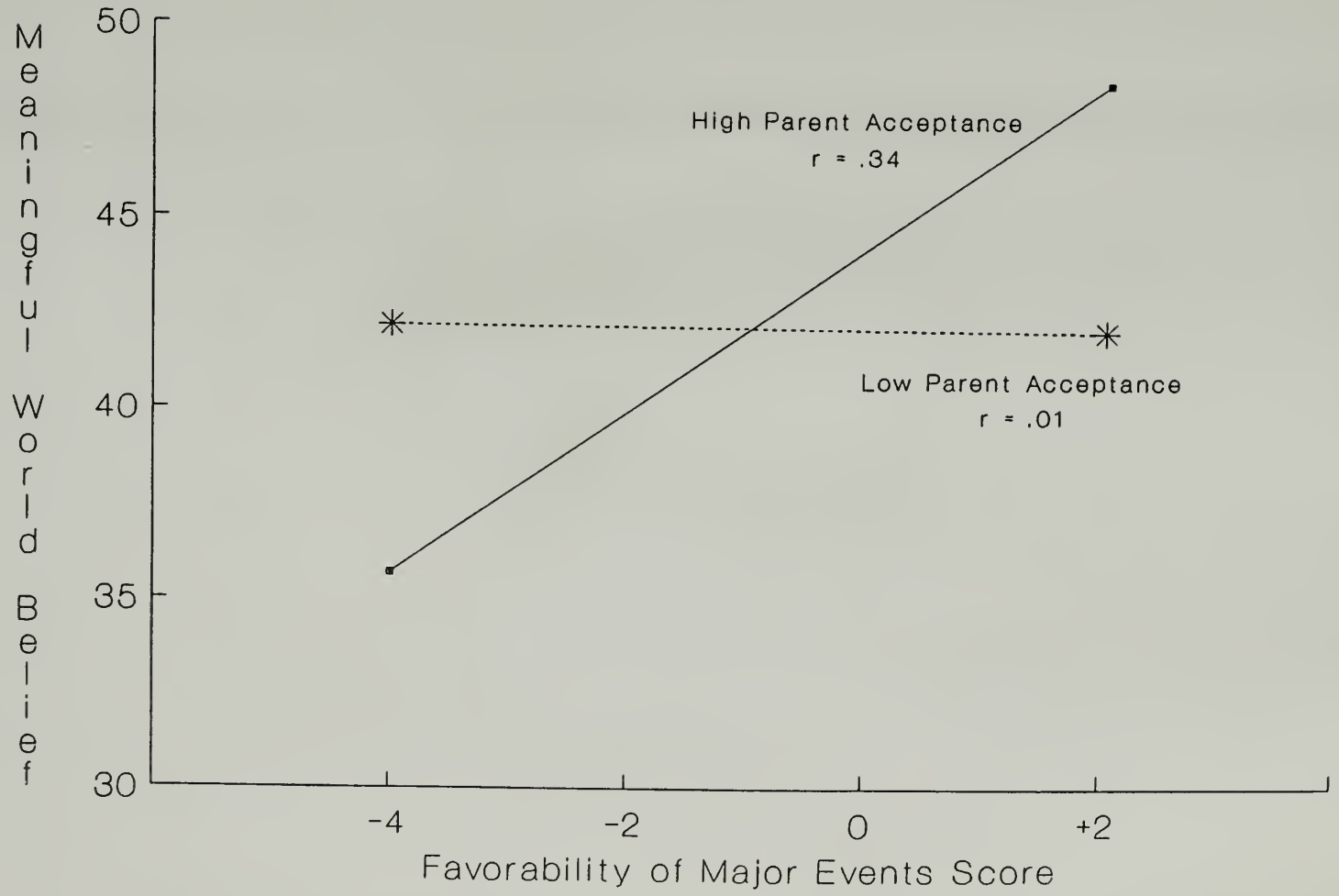


Figure 1. Interaction of Parent Acceptance and the Favorability of Major Events Score in regression equation on Meaningful World belief.

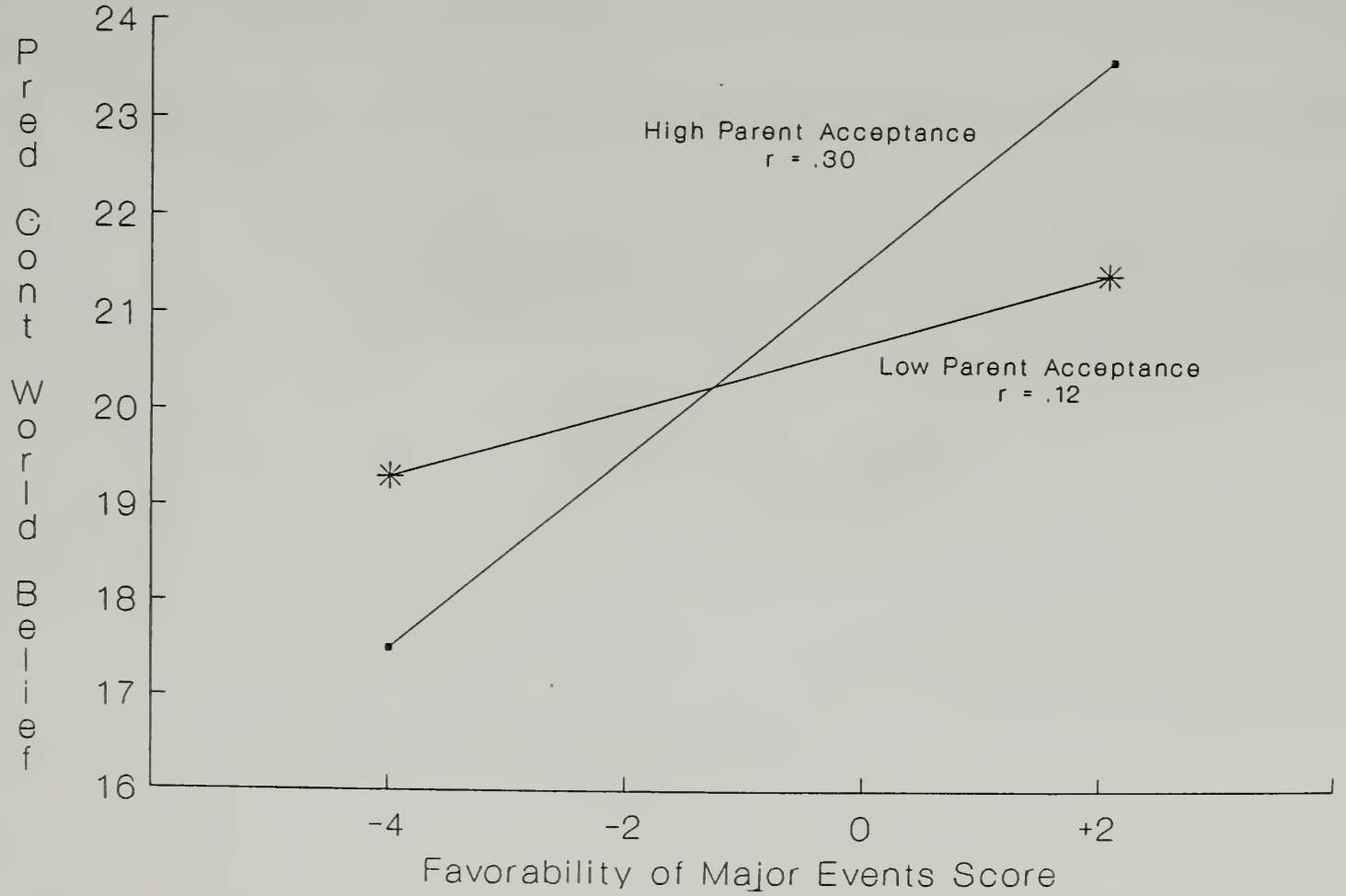


Figure 2. Interaction of Parent Acceptance and the Favorability of Major Events Score in regression equation on Predictable and Controllable World belief.

a positive nor a negative effect. Any experience that received an extreme score in the expected direction (-2 for negative events and +2 for positive events) on either of the two ratings was considered an "extreme" event.

Frequencies of extreme events and non-extreme events are shown in Table 14. In order to test the importance of reported intensity of the event, the eight beliefs for those reporting an extreme event were compared, using t-tests, to the beliefs of those who reported experiencing the event with a less extreme initial effect. As can be seen in Table 15, rejection is the event for which individuals who reported that the event had an extreme effect on them at the time it occurred differed most consistently across current basic beliefs from those who reported weaker effects. Subjects reporting an extreme experience of rejection had significantly less favorable beliefs regarding Meaningful World, Benign World, Just World, Global Self-esteem, and Love-worthiness. Subjects reporting an extreme experience of success had more favorable beliefs regarding Meaningful World, Desirability of Relationships, and Competence than those reporting non-extreme successes.

For four other events, move, death of someone close, parental divorce, and an accident that was someone else's responsibility, the intensity of the event was associated with significant differences in levels of one or two beliefs in the expected direction. Interestingly, the t-tests reported earlier comparing beliefs of those reporting an event to those not reporting the event found

Table 14

Number of subjects reporting extreme and non-extreme occurrences of events.

Event	Extreme initial effect		Non-extreme initial effect	
	n	%	n	%
Move	11	7	143	93
Death	19	9	184	91
Major Success	134	56	107	44
Rejection	72	48	77	52
Love	127	57	93	43
Immoral Act	50	36	89	64
Parental Divorce	9	13	56	87
Accident, Own Resp.	14	32	30	68
Accident, Oth's Resp.	6	11	51	89
Sexual Abuse	31	72	12	28
Violent Crime	15	63	9	37
Non-violent Crime	33	38	53	62
Natural Disaster	1	7	14	93

Table 15

Significant results of t-tests comparing levels of beliefs of subjects reporting extreme events (x on top) and subjects reporting non-extreme events (x on bottom).

	Basic Beliefs							
Events	Meaning	Benign World	Justice	Pred., Cont.	Relationships	Global S.-E.	Competence	Lovewor-thiness
Move			17.3**					
			19.4					
Death			17.9*					
			19.5					
Major Success	45.5*				57.3**		22.5*	
	43.6				55.2		21.6	
Rejection	42.5*	30.9*	18.3*			17.8**		23.1**
	45.1	32.4	19.3			20.2		25.6
Love					57.6*			
					55.5			
Immoral Act								
Parental Divorce								21.2**
								25.0
Accident, Own Resp.								
Accident, Oth's Resp.			17.0*					
			19.8					
Sexual Abuse								
Violent Crime								
Non-violent Crime								
Natural Disaster								

* p<.05; ** p<.01

no significant differences in beliefs for any of these events. Thus, it appears that reported intensity of each of these events is a better predictor of the event's effect on beliefs than the simple reported occurrence or non-occurrence of the event.

The effect on beliefs of the age at which a major event occurred

Subjects reported whether each event they experienced occurred between the ages of 0-5, 5-12, 12-14, 14-18, and over 18. (Reported in Table 5.) For those who reported experiencing an event, correlations were computed between age of occurrence and beliefs. Only in the case of subjects who had been victims of a violent crime did the age at which the event occurred correlate significantly with current beliefs. As shown in Table 16, the age at time of a violent crime was significantly positively associated with beliefs regarding Meaningful World, Benign World, and Global Self-esteem. Surprisingly, the weakest correlations with the age at which a violent crime occurred were with Just World and Love-worthiness, two beliefs that the occurrence or non-occurrence of a violent crime was previously shown to affect (Table 7). All of the correlations were positive, indicating that the younger the individuals were when the crime occurred, the less favorable were their current beliefs.

In order to explore possible moderating effects of gender, Parent Acceptance and Independence-Encouragement on the relation between age at which a violent crime occurred and basic beliefs, these variables were entered

Table 16

Correlations between beliefs and the age at which a violent crime occurred.

	Basic Beliefs							
	Mean-ing	Benign World	Just-ice	Pred., Cont.	Relation-ships	Global S.-E.	Compe-tence	Lovewor-thiness
Age at Violent Crime	.55**	.48**	.06	.30	.27	.41*	.26	.04

* p<.05; **p <.01. N=24

into regression equations predicting the eight beliefs. The order in which the independent variables were entered in the equation was gender first, Parent Acceptance and Independence-Encouragement second, the age at which the crime occurred third, and the two-way interactions fourth.

As shown in Table 17, no interactions with age appeared in the final equations. However, the three significant correlations between beliefs and age at time of the violent crime noted earlier (Table 16) all continued to be significant in the regression analyses. The age at which the violent crime occurred was significantly associated with Meaningful World, Benign World, and Global Self-Esteem. Younger ages were always associated with less favorable beliefs. In Table 17 it can also be seen that gender was significantly associated with Benign World, Just World and Predictable and Controllable World. Females had less favorable beliefs in every case. Finally, level of Parent Acceptance was directly correlated with three beliefs: the Desirability of Relationships, Global Self-esteem, and Love-worthiness, while Independence-Encouragement did not contribute to any of the equations.

Table 17

Results of multiple regression equations for beliefs of those subjects who reported experiencing a violent crime (n=24). Independent variables were gender, Parent Acceptance, Independence-Encouragement, age at which the violent crime occurred, and all two way interactions. Standardized regression coefficients are shown in parentheses.

Belief	Variables in the equation	r squared
Meaning	Age at crime (.55)**	.30
Benign World	Gender (-.51)** Age at crime (.53)**	.50
Just World	Gender (-.42)*	.18
Predictable Controllable	Gender (-.46)*	.21
Relationships	Parent Acceptance (.56)**	.31
Global Self-Esteem	Parent Acceptance (.47)* Age at crime (.38)*	.37
Competence	none	
Love-Worthiness	Parent Acceptance (.58)**	.34

*p <.05; ** p<.01

CHAPTER 3

DISCUSSION

At the most general level, this research pertains to the question of how the cognitive system works. Specifically, it explores the relation of current basic beliefs to reports of previous experiences, i.e., childhood relationships to parents and discrete events. The fundamental questions being asked are: Do experiences in the world affect the cognitive system in an enduring way; if so, what is the nature of that effect; and what does the specific nature of the effect suggest about the way the cognitive system works?

The Relation of Events to Beliefs

It is clear that even years after the experience, reliable associations exist between reports of certain discrete events and reports of particular basic beliefs. However, prior to drawing any conclusions regarding the meaning of these associations, the validity of the reports and all possible interpretations of the data need to be examined.

Validity of the Reports of Events and Beliefs.

Though there may be some inaccuracy in the data, it is most likely that the reports of the occurrence and non-occurrence of major life events have some degree of validity. Unintentional distortion of the data could come from two sources: 1) varied interpretations of what represents an event such as a "painful rejection" or a "significant love relationship" and 2) systematic under reporting negative events and over reporting positive

events. Despite both of these problems, it is reasonable to assume that a far greater portion of those reporting a given event have experienced that event than those reporting not having experienced the event.

There are two major issues relevant to the validity of the ratings of basic beliefs. First, it is possible that all of the subscales are measuring a general positivity effect. However, the magnitude of their inter-correlations is much smaller than their reliabilities, which indicates that they must be measuring different things. Also, the individual belief scales correlate differently and meaningfully with other variables. This data concurs with the position of Cognitive-Experiential Self-Theory that beliefs are distinct and yet not entirely independent. Second, the scales aim to assess beliefs which are thought to be preconscious and not necessarily accessible to direct conscious report. The items are designed to solve this problem to some extent by measuring experiential, not abstract beliefs.

Interpreting the Associations between Events and Beliefs.

A central tenet of Cognitive-Experiential Self-Theory is that beliefs about oneself and the world are largely generalizations derived from emotional experience. To support this view, one would ideally demonstrate that the occurrence of emotionally significant events causes changes in beliefs, but the feasibility of such a demonstration is questionable. The hypothesis could not be tested in a controlled experiment, and even a longitudinal study would not provide definitive results. At present,

the best that can be done is to examine all of the possible interpretations of the correlations that have been found between events and beliefs.

First, it is possible that in certain instances, existing levels of beliefs contributed to the occurrence or non-occurrence of events. This would seem particularly plausible in the case of those events, such as a major success, where the subject could readily have contributed to the occurrence of the event. As a case in point, consider the correlation between a major success and competence. One reason that people regard themselves as competent is that they are competent, and therefore more likely to achieve major success than others. Yet how does one become competent? Surely by achieving some genuine successes. That is, achievements precede and contribute to the belief in competence. No amount of parental- or self-affirmation regarding one's competence is likely to withstand the trials of adolescence without some degree of confirmation from actual successes in the world.

A second interpretation of the data is that a third factor contributed to both the occurrence of certain events and beliefs. The variable most likely to have had such an effect, socioeconomic status, was not measured in the present study. However, a similar study drawing subjects from essentially the same pool found no differences in socioeconomic status between those who did and did not report experiencing six potentially traumatic events similar to those included in the present study (Janoff-Bulman, 1986).

The final possibility is that events contributed to changes in beliefs. Cognitive-experiential Self-theory would make two predictions inthis regard. First, the most emotionally significant events would be expected to have the greatest impact on beliefs. This position is supported by the fact that the events that were associated with significant changes in the overall matrix of beliefs were major success, love, rejection, sexual abuse, and violent crime. By any measure, these must be among the most emotionally significant events studied. It is somewhat surprising that death of a loved one and parental divorce were not associated with changes in any beliefs, but this may be because both events could include a wide range of experiences including the death of a grand parent at a ripe age and the removal of a parent who made life insufferable.

The second prediction that Cognitive-experiential Self-theory would make is that while a particular event may have some impact on all beliefs, it would have the greatest effect on the specific beliefs most directly related to it. Thus, events that are primarily of an interpersonal nature would be expected to affect beliefs regarding the value of relationships and one's own loveworthiness. Unexpected events might influence Predictable and Controllable World. Achievement-related events would be expected to influence Competence.

The pattern of associations between beliefs and specific events generally conforms to this prediction. For instance, major success was associated with changes in

Meaningful World, Benign World, Predictable and Controllable World, Global Self-esteem, and Competence, but not with changes in the Desirability of Relationships and Love-worthiness. A significant love relationship was associated with changes in the Desirability of Relationships and Love-worthiness, as well as Global Self-esteem and Meaning, but not with Benign World, Just World, or Predictable and Controllable World.

For the negative events, the pattern of relations between events and beliefs generally adheres to a logical pattern but contains some surprises. Sexual abuse, which is increasingly understood to be a highly traumatic event affecting much of the personality, was associated with changes in Benign World, Just World, Predictable and Controllable World, Global Self-esteem, and Love-worthiness. These results appear logical as do the findings that beliefs in Meaning and Competence were not affected by sexual abuse. For rejection, it is understandable that beliefs in Benign World, Just World, and Predictable and Controllable World were all affected, but it is not clear why Global Self-esteem was affected when Loveworthiness and Desirability of Relationships were not. Finally, for violent crime, the association with Just World is logical, but it is not clear why there are significant associations to Loveworthiness and Desirability of Relationships and no correlation with Benign World or Predictable and Controllable World. Possibly many of the violent crimes reported were of a highly

personal nature (such as child abuse), but there is no data to support or refute such an argument.

Additional support for the interpretation that events caused changes in beliefs is provided by the direct reports of events' initial and lasting effects on beliefs. Especially for the major events, subjects consistently reported that events affected their self-esteem and liking and trust of others. This approach also concurred with the reports of current basic beliefs in pointing to major success, love, and sexual abuse as the events having the greatest impact on beliefs. Though these reports are vulnerable to demand characteristics and to subjects' pre-established beliefs about causal connections, there are two obvious advantages of this data: They directly relate to causality, or at least the subjects' beliefs about causality, and the effects of each event are reported independently of all the other events.

In summary, there is considerable support for the conclusion that emotionally significant events cause changes in beliefs. The specific correlations between events and beliefs generally confirm predictions that would be made in this regard, and the alternative interpretations are not well supported. This causal interpretation is further supported by the more direct reports of the effects of events on beliefs.

The relation of particular events to particular beliefs.

In the above argument, evidence is presented for a differential effect of events on beliefs. This possibility merits further discussion since it has not

been previously demonstrated. Janoff-Bulman (1986) found evidence of an enduring relation between events and beliefs, but all the events studied appeared to affect the same beliefs: self worth, chance as a distributional principle, and the benevolence of the impersonal world.

The most impressive evidence in the present study for a specific relation of events to beliefs is that all four of the major negative events, and none of the positive events, were significantly associated with beliefs concerning justice. This may reflect on an important point about peoples' understanding of justice. They believe an injustice has been done when events run against them, even in the case of an accident that they acknowledge was their own responsibility. However, they do not normally construe the world as unjust when good things happen to them, even if they recognize others may be more deserving. In that case, they make a different attribution calling themselves "lucky". The "goodness" is attributed to a fortunate quality that they accidentally possess rather than to the "unfair" capriciousness of the world.

In a similar vein, the two positive events, and none of the negative events, were associated with beliefs in one's competence and in the meaningfulness of life. Particularly in the case of competence, a line of reasoning similar to that accounting for the association between negative events and Justice would seem to apply. When people succeed, they are likely to make the attribution "I am competent." Failure is more likely to elicit

an external attribution such as "The test was unfair or too hard". In other words, the results are consistent with the operation of a self-serving bias with respect to the effect of negative and positive events on beliefs.

The hypothesis that specific events affect beliefs differentially was also supported by subjects' direct reports of the immediate as well as the long term effects of each event on self- esteem and on liking and trust of others. In regard to initial effects, subjects reported a significantly greater impact on self-esteem than on liking and trust of others for six events and a significantly greater impact on views of others than on self-esteem for two events. In regard to the lasting effects, subjects reported a significantly greater effect on self-esteem than on views of others for six events and a significantly greater effect on liking and trust of others than on self-esteem for four events. For only a small minority of the events, including mainly events that had no reported effect on beliefs, was the reported lasting effect on self-esteem not significantly different from the reported lasting effect on liking and trust of others.

Thus, the data provide considerable support for the view that specific events have a differential effect on beliefs. It has been shown that the more significant events effect a broader range of beliefs, that events tend to affect those beliefs that are most relevant to the specific nature of the experience, and that certain beliefs are most responsive to negative events while others are most responsive to positive events. Taken

together, these results suggest that the belief system responds to the world in a relatively reasonable, orderly manner.

Changes in the effect of events on beliefs over time.

The direct reports of the effect of events on beliefs indicated that the effects change over time. In most instances the lasting effect of an event was in the same direction but less extreme than the initial effect. However some events (a move, death of someone close, and a parental divorce) that were originally reported to have had significant negative initial effects were reported to have had positive (though in the case of death of someone close and parental divorce nonsignificant) lasting effects. This essentially replicates the finding by Epstein and Olfria (Reported in Epstein, 1983) that certain relatively neutral events tend to be reconstrued in an increasingly positive direction with the passage of time.

The changes in the effect of events on beliefs over time suggest two related points about the workings of the cognitive system. First, it is apparent that the salience of an event generally decreases over time. To put it another way, the most recent events appear to have the greatest effect on current beliefs. Why is this so? Epstein (1979) and Horowitz (1979) have argued that an event will return to conscious awareness again and again until its implications are integrated into the the belief system. Thus, events are initially more salient because they don't "fit in". This suggests that it is the

unexpected nature of an event that gives it its emotional significance. Of course some emotional events such as seeing others die in war may be anticipated by the conscious mind, but be entirely disruptive to the more preconscious system of basic beliefs. It is this later, preconscious system of basic beliefs that Cognitive-experiential Self-theory sees as the seat of emotions.

The second implication of the data is that the cognitive system is not simply a passive, receptive instrument. Over time it works on previous events and is capable of reconstruing them entirely. Cognitive-experiential Self-theory posits that the cognitive system has specific tasks to perform: to provide a means for ordering the data of experience, to maintain a favorable pleasure-pain balance, to maintain a favorable degree of self-esteem, and to create satisfactory relationships with other people. Certainly these tasks have a proactive effect on behavior: The individual seeks out experiences that will facilitate them. However, the data suggest that once an event has occurred, the cognitive system continues to pursue its goals by "rethinking" the experience. As Piaget has pointed out, the system may receive new information by adapting to or "accomodating" it, or it may actively assimilate the experience to the existing system by reconstruing the experience in a way that fits in. Especially in those cases where the reported effect of an event reverses from negative to positive, it would seem that the system has been actively working on the data.

As an example of this, consider a hypothetical child with positive self-esteem whose family moves from a familiar neighborhood to a strange city. Since self-esteem is at least partially dependent on satisfactory interactions with one's environment, the move might be expected to have an immediate negative impact on the child's self-esteem. However, the cognitive system will continue to look for ways to support the original views of the self. On the one hand the child may seek out new experiences that will reinforce the previous view. But simultaneously, internally the cognitive system may be looking for ways to convert the initially negative event into a positive one. For instance, it may begin to see reason for self-esteem in the fact that one has taken on the challenge of adapting to the new situation. Thus, the initial distress of the move is reconstrued as a potential reinforcer to the original view of oneself. This view suggests that supposedly objective external events may in some cases be more "malleable" than the belief system. Of more general interest however, is the suggestion of the active, creative nature of the cognitive system.

The role of intensity of the event and age at occurrence on the association between events and beliefs.

The data indicated that for some events the initial intensity of the experience and the age at which it occurred affected later beliefs. While intensity is a subjective rating, it may also reflect objective differences between events. In the case of rejection, which showed the broadest range of significant

associations between reported intensity of the experience and present beliefs, subjects were asked "Have you ever been painfully rejected by a loved one?". Experiences ranging from being turned down for a date to being turned out of one's home could have been included in this category. The important point here is that a broad range of subjective and objective experiences is included in all the categories. The results indicate that the subjective experience of the intensity of an event, which may or may not stem from objective differences, affected beliefs more than the occurrence or non-occurrence of an objective event. This result further supports the position of Cognitive-experiential Self-theory that beliefs are shaped by the experience of events as "emotionally significant", not simply by their objective occurrence. The same kind of reasoning may partially account for the finding that the younger the person is when subjected to a violent crime, the more negative are his or her current beliefs. Since data has already been discussed indicating that the effect of an event on beliefs diminishes over time, some other factor must account for this correlation. There are two possibilities. First, crimes that happen to one early in life may be more severe (emotionally significant) than those that occur later in life. Child beating is a crime experienced early in life, and, because of its severity, it would be expected to be associated with less favorable beliefs than having one's purse stolen, a violent crime more likely to occur later in life. Second, there is reason to suspect that even the same violent crime would

have a greater impact on the later beliefs of a young child than it would on the beliefs of a more mature adult. It has been argued by Sullivan (19) that a child is less able than an adult to blame the perpetrator of the crime (particularly if it is his or her parent) and more likely therefore, to conclude that he or she is a bad child deserving such treatment. The present study does not provide evidence regarding which, if either of these possibilities, explains the correlation between age at which a violent crime occurred and present beliefs. The importance of intensity was discussed above, and the special role of early experiences in the formation of the cognitive system will be examined in some detail below when relationships to parents are discussed.

The cumulative effect of major life events.

The final finding of importance in regard to the effect of events on beliefs concerns the effect of multiple events. In a study of six major negative events, Janoff-Bulman (1986) found "no differences between subjects who experienced single versus multiple victimizations". However, the present data indicated a cumulative effect across major life events. The Favorability of Major Events Score (calculated by subtracting the number of major negative events reported from the number of positive events reported) correlated more strongly with every belief than any single event. It made a strong and consistent contribution to regression equations for beliefs where individual events did not. This result is in accordance with the work of Rutter who

has found that ghetto children are increasingly disadvantaged by the cumulative effect of multiple stressors.

That events have a cumulative effect on beliefs further demonstrates the logical nature of the cognitive system. Several important events indicating one's world is a dangerous place would be expected to have a greater negative influence on the Benign World Belief than a single event. If a positive event then occurred, it stands to reason that the belief would be adjusted somewhat in the positive direction.

Relation of Early Childhood Relationships with Parents to Basic Beliefs

The accuracy of reports of early childhood relationships with parents is certainly open to question. Over time, memories of childhood are likely to change: These reports, like all retrospective data, probably reflect present attitudes as well as past experiences. It is also plausible that, even during early childhood, subjects' interpretations of their parents' behavior may have differed markedly from those of either their parents or an independent observer. Despite these considerations, it is not unreasonable to assume that the group of subjects who reported more positive relationships to their parents actually had more positive relationships than the group who reported less positive relationships. There is evidence of discriminant validity in that the Parent Acceptance x Love-worthiness correlation and the Independence-Encouragement x Competence correlation were

significantly stronger than the Parent Acceptance x Competence correlation and the IndependenceEncouragement x Loveworthiness correlations. Furthermore, more accurate reports might well account for more, not less, of the variance in basic beliefs. This, of course, remains to be demonstrated in future research.

Both in simple correlations and in regression equations, reports of childhood relationships to parents were consistently and reliably related to beliefs. Indeed, the strength of the association between beliefs and chlidhood relationships to parents generally surpassed that between beliefs and individual events or cumulative counts of events. These findings are consistent with the view that adult personality is strongly influenced by early childhood experience within which relationships to parents are the primary factor. When parents accept their children as they are and encourage them to take appropriate steps toward independence, the children develop a positive core of beliefs about the self and world that tends to be sustained into the adult years. These children begin life with self-images built around a "good-me" concept (Sullivan, 1953), and they see the external world as a benign and orderly place. In contrast, when parents are rejecting or overprotective of their children, the children develop a negative core to their belief systems. "Bad me" or "not-me" may become the concept central to their self-image, and they view the external world as a dangerous and confusing place.

If all experiences are interpreted through the lens of the cognitive system resulting from past experiences, those experiences that occur earliest in life would be expected to have the greatest effect on beliefs. An important principle behind this effect may be the need to maintain continuity. For the child whose early experience establishes an impression of the world as a dangerous place, it may be less threatening to seek out and interpret events in a manner consistent with that view than to revise such a fundamental belief.

The Effect on Basic Beliefs of the Interaction of Events and Childhood Relationships with Parents

The third major question addressed by this research concerned whether or not particular kinds of parenting might have a buffering effect on the relation of major events and beliefs, i.e., whether parent relationships are a moderator variable for the relation between events and beliefs. Evidence for this would be the appearance of significant interactions between relationship-to-parent variables and events in the regression equations for beliefs. When single events were entered into the regression equations for beliefs, no such interactions appeared. However, when the Favorability of Major Events Score was entered into the regression equations for beliefs, in two instances a significant interaction appeared. The interaction between Parent Acceptance and the Favorability of Major Events Score made a significant contribution to Meaningful World and to Predictable and Controllable World. In each case, for the low Parent

Acceptance group, there was a nonsignificant relation between major events and beliefs. For the high Parent Acceptance group, however, events were significantly related ($p<.01$) to the beliefs of Meaningful World and of Predictable and Controllable World. Subjects with a high number of positive relative to negative events, reported more favorable levels of these beliefs than subjects with a preponderance of negative events. Thus, it appears that highly accepting parents are an asset to those who experience mostly the positive side of life. However, for those who encounter more of life's negative vicissitudes, high levels of parental acceptance may not provide optimum preparation for coping with later misfortunes. If one's belief system is built around an extremely secure childhood, radical adjustments in basic beliefs may be necessary to integrate major negative events.

Concluding Comments

The hypothesis underlying every aspect of the present study is that higher favorable levels of the eight basic beliefs are better than lower favorable levels of the beliefs. Within reasonable limits, this is the position of Cognitive-experiential Self-theory. Of course, people who believe themselves to be competent in every field or deserving of everyone's love are deluded. Similarly, extreme beliefs in the value of relationships or the extent to which events are predictable and controllable would be suspicious. However, the scales used to measure beliefs do not contain unrealistically extreme items. In

every case, the response which contributes most to the overall belief score is the response representing the most desirable level of belief.

The basic beliefs investigated were chosen because they reflected the four primary tasks of the cognitive system: 1) to organize the data of experience, 2) to maintain a favorable pleasure-pain balance, 3) to maintain a favorable level of self-esteem and 4) to create satisfactory relationships with other people. Through the measurement of the eight beliefs, we now have an indication of the degree to which the cognitive system is functioning positively. This provides an initial component for the measurement of psychological health from the perspective of Cognitive-Experiential Self-Theory.

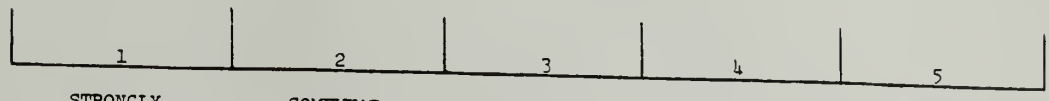
The present study has presented evidence that both perceptions of early childhood relationships to parents and the occurrence or non-occurrence of certain major life events are associated with different basic beliefs, and thus it may be inferred, different degrees of psychological health. It was a broad survey that has indicated many avenues of potentially fruitful future research. Any one of the major life events shown to correlate significantly with beliefs could be profitably studied in greater detail. Similarly, the origins and function of any one of the basic beliefs could be thoroughly examined. Finally, it appears that a more objective and detailed assessment of childhood relationships with parents would contribute substantially to the cognitive approach to personality.

APPENDIX

Questionnaires

MFP SCALE RM 4/6/83

Indicate the extent to which the following statements describe your childhood relationship with the people indicated by using the following scale:



1	2	3	4	5
STRONGLY DISAGREE WITH STATEMENT	SOMEWHAT DISAGREE WITH STATEMENT	UNCERTAIN ABOUT STATEMENT	SOMEWHAT AGREE WITH STATEMENT	STRONGLY AGREE WITH STATEMENT

WHEN I WAS A CHILD, MY MOTHER (or mother substitute):

1) encouraged me to make my own decisions.
2) helped me learn to be independent.
3) felt she had to fight my battles for me when I had a disagreement with a teacher or a friend.
4) was overprotective of me.
5) encouraged me to do things for myself.
6) encouraged me to try things my way.
7) did not let me do things that other kids my age were allowed to do.
8) sometimes disapproved of specific things I did, but never gave me the impression that she disliked me as a person.
9) enjoyed being with me.
10) was someone I found very difficult to please.
11) usually supported me when I wanted to do new and exciting things.
12) worried too much that I would hurt myself or get sick.
13) was often rude to me.
14) rarely did things with me.
15) didn't like to have me around the house.
16) would often do things for me that I could do for myself.
17) let me handle my own money.
18) could always be depended upon when I really needed her help and trust.
19) did not want me to grow up.
20) tried to make me feel better when I was unhappy.
21) encouraged me to express my own opinion.
22) made me feel that I was a burden to her.
23) gave me the feeling that she liked me as I was; she didn't feel she had to make me over into someone else.

WHEN I WAS A CHILD, MY FATHER (or father substitute):

24) encouraged me to make my own decisions.
25) helped me learn to be independent.
26) felt he had to fight my battles for me when I had a disagreement with a teacher or a friend.

(OVER)

1	2	3	4	5
STRONGLY DISAGREE WITH STATEMENT	SOMEWHAT DISAGREE WITH STATEMENT	UNCERTAIN ABOUT STATEMENT	SOMEWHAT AGREE WITH STATEMENT	STRONGLY AGREE WITH STATEMENT

RM 4/5/83

27) was overprotective of me.

28) encouraged me to do things for myself.

29) encouraged me to try things my way.

30) did not let me do things that other kids my age were allowed to do.

31) sometimes disapproved of specific things I did, but never gave me the impression that he disliked me as a person.

32) enjoyed being with me.

33) was someone I found very difficult to please.

34) usually supported me when I wanted to do new and exciting things.

35) worried too much that I would hurt myself or get sick.

36) was often rude to me.

37) rarely did things with me.

38) didn't like to have me around the house.

39) would often do things for me that I could do for myself.

40) let me handle my own money.

41) could always be depended upon when I really needed his help and trust.

42) did not want me to grow up.

43) tried to make me feel better when I was unhappy.

44) encouraged me to express my own opinion.

45) made me feel I was a burden to him.

46) gave me the feeling that he liked me as I was; he didn't feel he had to make me over into someone else.

WHEN I WAS A CHILD, <u>OTHER CHILDREN</u>:

47) liked to play with me.

48) were always criticizing me.

49) often shared things with me.

50) often picked on me and teased me.

51) were usually friendly to me.

52) would usually stick up for me.

53) liked to ask me to go along with them.

54) wouldn't listen when I tried to say something.

55) were often unfair to me.

56) would often try to hurt my feelings.

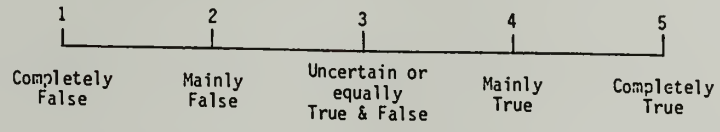
Form SEGC 111585

Personal Beliefs and Attitudes Test

The following are some statements on feelings, attitudes, and behavior. Score "1" if the statement is completely false; "5" if it is completely true. A rating of "2" will indicate that the statement is mainly false; a rating of "4", that it is mainly true. Use "3" if the statement is about equally true and false.

Be honest, but do not spend too much time on any one statement. As a rule, first impressions are as accurate as any.

Please do not mark this questionnaire. Write all your answers on the answer sheet provided.



1. Most people who know me consider me to be an optimistic person.
2. I feel that I have little control over the important events in my life.
3. By and large, people get what they deserve in this world.
4. I believe there is more evil than good in this world.
5. Most people mean to be kind and helpful.
6. I feel I get a raw deal out of life.
7. There are one or more people close to me in whom I can confide.
8. I have never combed my hair before going out in the morning.
9. I have become cynical about justice in this world.
10. I don't know what to believe in anymore.
11. In the long run, people who are selfish or dishonest pay for it in one way or another.
12. I don't seem to get what is coming to me.
13. I have a strong belief system that I can rely on for solving life's problems.
14. My faith in the human race has been badly shattered.
15. At times when I was ill or tired, I have felt like going to bed early.
16. By and large, the world has treated me fairly.
17. I find it a burden to interact with people.
18. I believe I can make the kind of life I want for myself.
19. I have much to look forward to.
20. My life is lacking in purpose and meaning.
21. I am an optimistic person.
22. Most people don't really care about what happens to the next fellow.
23. People usually bring on their own misfortune.
24. I often have the feeling that the world has not been fair to me.
25. Driving from New York to San Francisco is generally faster than flying between these cities.
26. I find people, these days, to be more of a source of irritation than of pleasure.
27. I sometimes have the feeling that something terrible is about to happen.
28. I believe I am treated fairly in my day-to-day world.
29. Good guys usually come out last.
30. There are few people whom I can really trust.

31. I feel that nothing matters anymore.

32. I believe that most authorities try to be fair and honest.

33. You never know what is going to happen tomorrow.

34. On some occasions I have noticed that some other people are better dressed than myself.

35. I have clear-cut and interesting life goals.

36. I believe that misfortunes result mainly from one's own mistakes.

37. If I were in trouble, I would not hesitate to ask for help from others.

38. I like people and believe in giving them the benefit of the doubt.

39. Luck is an illusion; what people get depends on what they do.

40. I feel I just can't get a hold on things.

41. I can no longer trust people the way I used to.

42. I often feel lonely and isolated from people.

43. I find that I often walk with a limp which is a result of a skydiving accident.

44. In general, the good things in my personal world outnumber the bad.

45. I have a clear sense of who I am and what I want.

46. There is little justice in this world.

47. The world for me has become an ugly place.

48. I often feel that life is uncertain and unpredictable.

49. By and large I feel that my personal world is a reasonably safe and secure place.

50. Life has meaning and purpose for me.

51. Most of the significant events in my life are due to factors beyond my control.

52. I find it hard to be close to anyone.

53. There are times when I have dialed a telephone number only to find that the line was busy.

54. I tend to be neither optimistic nor pessimistic, but realistic.

55. I believe that most people can be trusted.

56. I feel like an aimless wanderer in life.

57. Human nature is basically good.

58. I feel that, by and large, the world is orderly and predictable.

59. I cannot remember a time when I talked with someone who wore eyeglasses.

60. Most people either can't or won't help you when you need them most.

61. I often marvel at the beauty of the world.

62. There are some people I feel very close to.

63. The major unhappy events in people's lives are more often produced by their own behavior than by chance.

64. I don't know what I want out of life.

65. The world has been good to me.

66. I view my personal, day-to-day world as a dangerous place.

67. I often feel I might just as well decide what to do by flipping a coin.

68. I feel that my personal problems have been caused by others.

69. I believe most lightbulbs are powered by electricity.

70. I often feel that life is so unpredictable that there is no point in planning for the future.

71. I have a clear sense of values.

72. At this point in my life, I need time by myself to sort things out.

73. I believe that good people usually end up with good lives.

74. It seems to me that other people often have more difficulty trying to decide right from wrong than I do.

75. I know where I'm going and what I want out of life.

76. I believe the police are more often crooked than not.

77. I sometimes wonder whether anything is worthwhile.

78. I often feel that the world, at large, is a dangerous place.

79. I enjoy the company of others.

80. I have taken this test very carefully.

Coping with Stress

Use the scale below to rate the extent to which you respond to stressful events in the following ways:

1 = Not at all
2 = Occasionally
3 = Now and then
4 = Fairly often
5 = Frequently

Do not write on this form. Enter your answer with a #2 pencil on the Opscan sheet provided. Answer all items; do not leave any blank.

How do you typically respond to stressful events?

81. I get hostile and take my feelings out on others.

82. I seek isolation and quiet.

83. I do something risky or exciting, like driving recklessly, skiing, riding a motorcycle, or mountain climbing.

84. I get together with others, do things with friends, or go to social gatherings.

85. I share my experience with a sympathetic, understanding person.

86. I work extra hard and try to accomplish something worthwhile.

87. I divert my attention away from my troubles by seeking entertainment, such as going to the movies; or I distract myself with some activity, such as physical exercise or routine work.

88. I deal with the problem directly by taking planned action and trying to change the situation.

Significant Events Inventory

Below are several series of questions on life events that can produce changes in how people feel about themselves and others. There are six questions in each series. The first question in each series asks if you have experienced the event. Indicate if you have or have not by using the first rating scale below. If you have, answer the remaining questions on when the event occurred and how it influenced you. If you have not experienced the event, skip to the first question in the next series.

If you have experienced an event more than once, rate the single occurrence that had the greatest influence on you.

Enter all answers on the answer sheet. Do not write on this questionnaire.

Rating Scales:

For the first item in a series:

1 = no 2 = yes

For the second item a in series:

1	2	3	4	5
0-5 preschool	5-12 elementary school	12-14 early adolescence	14-18 mid adolescence high school	18 or over college

For items three-six in a series:

1	2	3	4	5
strong negative effect	negative effect	no particular effect	positive effect	strong positive effect

---

1) Has a move from one place of residence to another ever affected your feelings about yourself or others?

2) How old were you when the event occurred?

3) Initial effect on your self esteem?

4) Initial effect on your liking and/or trust of others?

5) What lasting effect, if any, on your present self esteem?

6) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++

7) Have you ever experienced the death of someone important to you?

8) How old were you when the event occurred?

9) Initial effect on your self esteem?

10) Initial effect on your liking and/or trust of others?

11) What lasting effect, if any, on your present self esteem?

12) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++

13) Have you ever experienced a major success in a difficult undertaking or received recognition for an outstanding achievement?

14) How old were you when the event occurred?

15) Initial effect on your self esteem?

16) Initial effect on your liking and/or trust of others?

17) What lasting effect, if any, on your present self esteem?

18) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++

19) Have you ever been painfully rejected by a loved one?

20) How old were you when the event occurred?

21) Initial effect on your self esteem?

22) Initial effect on your liking and/or trust of others?

23) What lasting effect, if any, on your present self esteem?

24) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++

25) Have you ever experienced an intense, positive love relationship?

26) How old were you when the event occurred?

27) Initial effect on your self esteem?

28) Initial effect on your liking and/or trust of others?

29) What lasting effect, if any, on your present self esteem?

30) What lasting effect, if any, on your present liking and/or trust of others?

31) Have you ever done something that might be considered immoral or illegal that made you feel deeply ashamed?

32) How old were you when the event occurred?

33) Initial effect on your self esteem?

34) Initial effect on your liking and/or trust of others?

35) What lasting effect, if any, on your present self esteem?

36) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++

37) Have your parents been separated or divorced?

38) How old were you when the event occurred?

39) Initial effect on your self esteem?

40) Initial effect on your liking and/or trust of others?

41) What lasting effect, if any, on your present self esteem?

42) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++

43) Have you ever been involved in a serious accident that you could reasonably be expected to have done something to avoid?

44) How old were you when the event occurred?

45) Initial effect on your self esteem?

46) Initial effect on your liking and/or trust of others?

47) What lasting effect, if any, on your present self esteem?

48) What lasting effect, if any, on your present liking and/or trust of others?

49) Have you ever been involved in a serious accident that you could not reasonably be expected to have done anything to avoid?

50) How old were you when the event occurred?

51) Initial effect on your self esteem?

52) Initial effect on your liking and/or trust of others?

53) What lasting effect, if any, on your present self esteem?

54) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++++++++

55) Have you ever been a victim of rape, incest, or sexual abuse of some kind?

56) How old were you when the event occurred?

57) Initial effect on your self esteem?

58) Initial effect on your liking and/or trust of others?

59) What lasting effect, if any, on your present self esteem?

60) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++++

61) Have you ever been a victim of a violent crime other than rape, such as being beaten-up or mugged?

62) How old were you when the event occurred?

63) Initial effect on your self esteem?

64) Initial effect on your liking and/or trust of others?

65) What lasting effect, if any, on your present self esteem?

66) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++++

67) Have you ever been a victim of a nonviolent crime such as a robbery?

68) How old were you when the event occurred?

69) Initial effect on your self esteem?

70) Initial effect on your liking and/or trust of others?

71) What lasting effect, if any, on your present self esteem?

72) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++++

73) Have you ever been the victim of a natural disaster such as having your house destroyed by a hurricane or fire?

74) How old were you when the event occurred?

75) Initial effect on your self esteem?

76) Initial effect on your liking and/or trust of others?

77) What lasting effect, if any, on your present self esteem?

78) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++++

79) Has any other specific event (not listed above) had a significant effect on your present feelings about yourself and others? (1=no, 2=yes)

If "yes", briefly identify the event in the top margin of the answer sheet, and then answer the questions below.

80) How old were you when the event occurred?

81) Initial effect on your self esteem?

82) Initial effect on your liking and/or trust of others?

83) What lasting effect, if any, on your present self esteem?

84) What lasting effect, if any, on your present liking and/or trust of others?

++++++++++++++++++++++

For the following questions, please select the event from above that had the greatest lasting effect on you. Identify this event by entering the two digit item number (01 - 73) that identifies the event as listed above in the last two columns ("O" and "P") of the "special codes" section of the answer sheet. For example, if the death of someone important to you had the greatest lasting effect, you would enter 07 under "O" and "P". If a positive love relationship had the greatest lasting effect, you would enter 25 under "O" and "P". Make sure to blacken in the spaces for each entry.

85) On the answer sheet mark the number below which most accurately describes what caused the event.

1) own behavior for which you consider yourself responsible
2) deliberate act by someone else
3) unintentional act by someone else
4) impersonal world (hurricane, fire, etc.)

86) How old were you when the event occurred?

87) Initial effect on your self esteem?

88) Initial effect on your liking and/or trust of others?

89) What lasting effect, if any, on your present self esteem?

90) What lasting effect, if any, on your present liking and/or trust of others?

Thank you.

Self-Report Inventory*

Short Form

Part A: Please indicate how accurately the following items describe you. Mark all of your answers on the answer sheet provided, do not make any marks on this form. Be sure to use a soft lead pencil (#2 or less).

Work as quickly as you can without making careless errors. It is best to rely on first impressions in answering each item. Use the following scale for your responses:

1	2	3	4	5
Completely False	Mainly False	Partly True and Partly False	Mainly True	Completely True

1. I nearly always feel that I am physically attractive.

2. I am very well liked and popular.

3. In general, I know who I am and where I am headed in my life.

4. No matter what the pressure, no one could ever force me to hurt another human being.

5. I nearly always feel that I am physically fit and healthy.

6. On occasion, I have tried to find a way to avoid unpleasant responsibilities.

7. I am usually a lot more comfortable being a follower than a leader.

8. I often feel that I lack direction in my life--i.e., that I have no long-range goals or plans.

9. I sometimes feel disappointed or rejected because my friends haven't included me in their plans.

10. I almost always have a clear conscience concerning my sexual behavior.

*Pre-publication draft (Form 71783). To be used only with written permission. Requests to use this inventory should be addressed to: Edward J. O'Brien, Department of Psychology, Marywood College, Scranton, Pennsylvania 18509.

1	2	3	4	5
Completely False	Mainly False	Partly True and Partly False	Mainly True	Completely True

11. There are times when I doubt my sexual attractiveness.

12. Most people who know me consider me to be a highly talented and competent person.

13. There have been times when I felt ashamed of my physical appearance.

14. I have trouble letting others know how much I care for and love them.

15. There have been times when I have felt like getting even with somebody for something they had done to me.

16. There are times when I have doubts about my capacity for maintaining a close love relationship.

17. I feel that I have alot of potential as a leader.

18. There are no areas in which I have truly outstanding ability.

19. In times of uncertainty and self doubt, I have always been able to turn to my family for encouragement and support.

20. The thought of shoplifting has never crossed my mind.

21. I feel that I don't have enough self discipline.

22. I have never felt that I was punished unfairly.

23. I seldom experience much conflict between the different sides of my personality.

24. I occasionally have had the feeling that I have "gone astray," and that I am leading a sinful or immoral life.

25. I am sometimes concerned over my lack of self control.

26. I am usually very pleased and satisfied with the way I look.

27. I often feel torn in different directions and unable to decide which way to go.

28. There have been times when I intensely disliked someone.

29. There have been times when I have felt rejected by my family.

30. I have often acted in ways that went against my moral values.

1 Completely False	2 Mainly False	3 Partly True and Partly False	4 Mainly True	5 Completely True

31. It hardly ever matters to me whether I win or lose in a game.

32. People nearly always enjoy spending time with me.

33. There have been times when I have lied in order to get out of something.

34. I put myself down too much.

35. I have almost never felt the urge to tell someone off.

36. There have been occasions when I took advantage of someone.

37. Most of the people I know are in better physical condition than I am.

38. I often give in to temptation and put off work on difficult tasks.

39. I nearly always have a highly positive opinion of myself.

Be sure to read the
Directions for Part B before you proceed.

Part B: In this section you are to describe how often you experience the thoughts and feelings described in each item. Use the following scale for your responses:

1 Almost Never	2 Seldom or Rarely	3 Sometimes	4 Fairly Often	5 Very Often

40. How often do you expect to perform well in situations that require alot of ability?

41. How often do you feel that others are attracted to you because of the way you look?

42. How often do members of your family have difficulty expressing their love for you?

43. How often do you feel dissatisfied with yourself?

44. How often do you wish that you were more physically attractive?

45. How often do you feel a sense of vitality and pleasure over the way your body functions in physical activities?

1 Almost Never	2 Seldom or Rarely	3 Sometimes	4 Fairly Often	5 Very Often

46. How often do you feel that you are a very important and significant person?

47. Do you ever "stretch the truth" and say things that aren't completely true?

48. How often do you have trouble learning difficult new tasks?

49. When you are meeting a person for the first time, do you ever think that the person might not like you?

50. How often are you pleased with yourself because of the amount of self discipline and willpower that you have?

51. How often do you feel very certain about what you want out of life?

52. How often do you feel that you are more successful than most people at controlling your eating and drinking behavior?

53. How often does your body perform exceptionally well in physical activities, such as dancing or sports?

54. How often do you feel uncertain of your moral values?

55. How often do you feel really good about yourself?

56. Do you ever gossip?

57. How often do you feel able to openly express warm and loving feelings toward others?

58. How often do you feel clumsy when you are involved in physical activities?

59. How often do you feel conflicted or uncertain about your career plans?

60. How often do you lose when you get into arguments or disagreements with others?

61. How often do you gladly accept criticism when it is deserved?

62. How often do you feel lacking in self-confidence?

63. How often do you feel certain that people you meet will like you?

64. How often are you pleased with your sense of moral values?

65. Does it ever seem to you that some people dislike you intensely, that they "can't stand" you?

1 Almost Never	2 Seldom or Rarely	3 Sometimes	4 Fairly Often	5 Very Often

66. How often are you able to be assertive and forceful in situations where others are trying to take advantage of you?

67. Have you ever felt that you lack the intelligence needed to succeed in certain types of interesting work?

68. How often do you feel that you are one of the more popular and likable members of your social group?

69. Have you ever felt irritated when someone asked you for a favor?

70. How often do people whom you love go out of their way to let you know how much they care for you?

71. How often are you able to resist temptations and distractions in order to complete tasks you are working on?

72. How often do you feel uneasy when you are in a position of leadership?

73. How often do you approach new tasks with alot of confidence in your ability?

74. How often do you have a strong influence on the attitudes and opinions of others?

75. How often do you enjoy having others watch you while you are engaged in physical activities such as dancing or sports?

76. How often is it hard for you to admit it when you have made a mistake?

77. How often do you feel highly satisfied with the way you live up to your moral values?

REFERENCES

Achte, K. A., & Vauhkonen, M. L. (1971). Cancer and the psyche. Omega, 2, 46-56.

Adler, A. (1927). The practice and theory of individual psychology. New York: Harcourt, Brace & World.

Averill, J. R. (1980). The emotions. In E. Staub (Ed.), Personality: Basic aspects and current research. Englewood Cliffs, N.J.: Prentice Hall.

Bandura, A. (1977a). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.

Bolles, R. C. (1974). Cognition and motivation: Some historical trends. In B. Weiner (Ed.), Cognitive views of human motivation. New York: Academic Press.

Bowlby, J. (1969). Attachment and loss: Vol. 1 Attachment. New York: Basic Books.

Bulman, R. J., & Wortman, C. B. (1977). Attributions of blame and coping in the "real world": Severe accident victims react to their lot. Journal of Personality and Social Psychology, 35, 351-363.

Burgess, A. W., & Holmstrom, L. L. (1974). Rape trauma Syndrome. American Journal of Psychiatry, 131, 981-986.

Burgess, A. W., & Holmstrom, L. I. (1979). Rape Crisis and Recovery. Bowie, MD: Brady.

Chesser, E. S., & Anderson, J. L. (1975). Psychological considerations in cancer of the breast. Proceedings of the Royal Society of Medicine, 68, 793-795.

Cohn, F., & Lazarus, R. S. (1979). Coping with the stress of illness. In G. Stone, F. Cohen, & N. E. Adler (Eds.), Health Psychology - A Handbook. San Francisco: Jossey-Bass.

Dember, W. N. (1974). Motivation and the cognitive revolution. American Psychologist, 29, 161-168.

Epstein, S. (1973). The self-concept revisited, or a theory of a theory. American Psychologist, 28, 404-416.

Epstein, S. (1979). The ecological study of emotions in humans. In P. Pliner, K. R. Blainstein, & I, M. Spigel (Eds.), Advances in the study of communication and affect (Vol. 5): Perception of emotions in self and others. New York: Plenum.

Epstein, S. (1980). The self-concept: A review and a proposal of an integrated theory of personality. In E. Staub (Ed.), Personality: Basic issues and current research. Englewood Cliffs, NJ: Prentice-Hall.

Epstein, S., & Erskine, N. (1983). The development of personal theories of reality from an interactional perspective. In D. Magnusson & V. L. Allen (Eds.), Human development: An interactional perspective. New York: Academic Press.

Erickson, E. (1986). Childhood in Society. New York: Norton.

Flannery, R. B. (1986). Major life events and daily hassels in predicting health status: methodological inquiry. Journal of Clinical Psychology, 42, 485 - 487.

Fletcher, K. (1988). Belief systems, exposure to stress, and post-traumatic stress disorder in Vietnam veterans. Doctoral Dissertation, University of Massachusetts at Amherst.

Freud, S. (1976). Three essays on the theory of sexuality. In J. Strachey (Ed. and Trans.), The standard edition of the complete psychological works of Sigmund Freud. Vol. 7. London: Hogarth Press. (Original work published 1905)

Friedman, S. B., Chodoff, P., Mason, J. W., & Hamberg, D. A. (1963). Behavioral observations on parents anticipating the death of a child. Pediatrics, 32, 610-625.

Hann, N. (1977). Coping and Defending. New York: Academic Press.

Hilgard, E. R. (1980). Consciousness in contemporary psychology. Annual Review of Psychology, 31. 1-26.

Hinton, J. M. (1963). The physical and mental distress of dying. Quarterly Journal of Medicine, 32, 1-21.

Horowitz, M. J. (1976). Stress response syndromes. New York: Aronson.

Horowitz, M. J. (1979). Psychological response to serious life events. In V. Hamilton and D. Warburton (Eds.), Human stress and cognition. New York: Wiley & Sons.

Horney, K. (1945). Our inner conflicts. New York: Norton.

Janoff-Bulman, R. (1979). Characterological versus behavioral self-blame: Inquiries into depression and rape. Journal of Personality and Social Psychology, 37(10), 1798-1809.

Janoff-Bulman, R. (1986). Understanding people in terms of their assumptive worlds. In D. J. Ozer, J. M. Healy, & A. J. Stewart, (Eds.), Perspectives in personality: Self and emotion. Greenwich, CT: JAI.

Janoff-Bulman, R. & Frieze, I. H. (1983). A theoretical perspective for understanding reactions to victimization. Journal of Social Issues, 39, 1-17.

Kaltreider, N. B., Wallace, A., & Horowitz, M. J. (1979). A field study of the stress response syndrome: Young women after hysterectomy. Journal of the American Medical Association, 242, 1499-1503.

Kelly, G. A. (1955). The psychology of personal constructs (2 vols.). New York: Norton.

Kilpatrick D. G., Veronen, L. J., & Resick, P. A. (1979). The aftermath of rape: Recent empirical findings. American Journal of Orthopsychiatry, 49, 658-669.

Klinger, E. (1975). Consequences of commitment to and disengagement from incentives. Psychological Review, 82, 1-25.

Klinger, E. (1977). Meaning and void: Inner experience and the incentives in peoples lives. Minneapolis: University of Minnesota Press.

Kohlberg, L. (1963). The development of children's orientations toward a moral order. I. Sequence in the development of moral thought. Vita Humana, 6.

Kuhn, T. S. (1970). The structure of scientific revolutions. Chicago: University of Chicago Press.

Maguire, G.P. (1978). Psychiatric problems after masectomy. In P. C. Brand & P. A. van Keep (Eds.), Breast Cancer: Psycho-social aspects of early detection and treatment. Baltimore: University Park Press.

McCombie, S. L. (1975). Characteristics of rape victims seen in crisis interviewing. Smith College Studies in Social Work, 46, 137-158.

Meyer, C. B. & Taylor, S. E. (1986). Adjustment to rape. Journal of Personality and Social Psychology, 50, 1226-1234.

Morris, T., Greer, H. S., & White, P. (1977). Psychological and social adjustment to a masectomy: A two-year follow-up study. Cancer, 40, 2381-2387.

Notman, M. T., & Nadelson, C. C. (1976). The rape victim: Psychodynamic considerations. American Journal of Psychiatry, 133, 408-412.

O'Brien, E. J. (1980). The self-report inventory: Development and validation of a multidimensional measure of the self-concept and sources of self-esteem. Doctoral Dissertation, University of Massachusetts at Amherst.

Parkes, C. M. (1971). Psycho-social transitions: A field for study. Social Science and Medicine, 5, 101-115.

Parkes, C. M. (1972a). Components of the reaction to the loss of a limb, spouse or home. Journal of Psychosomatic Res., 16, 343-349.

Parkes, C. M. (1972b). Bereavement: Studies of grief in adult life. London: Travistock Publications.

Parkes, C. M. (1975). What becomes of redundant world models? A contribution to the study of adaptation to change. British Journal of Medical Psychology, 48, 131-137.

Ricks, M. R. (1985). The social transmission of parental behavior: Attachment across generations. In I. Bretherton & E Waters (Eds.), Growing points of attachment theory and research. Monographs of the society for research in child development, 50, 211-227.

Rychlak, J. F. (1981). Introduction to personality and psychotherapy. Boston: Houghton Miffin.

Schmale, A. H. (1971). Psychic trauma during bereavement. International Psychiatric Clinics, 8, 147-168.

Seligman, M. E. P. (1975). Helplessness: On depression, development and death. San Francisco: W. H. Freeman.

Skinner, B. F. (1953). Science and human behavior. New York: Macmillan.

Shontz, F. C. (1975). The psychological aspects of physical illness and disability. New York: Macmillan.

Silver, R. L., & Wortman, C. B. (1980). Coping with undesirable life events. In J. Garber & M. E. P. Seligman (Eds.), Human helplessness. New York: Academic Press.

Sperry, R. W. (1970). An objective approach to subjective experience: Further explanation of a hypothesis. Psychological Review, 77, 532-536.

Sperry, R. W. (1980). Mind-brain interaction: Mentalism, yes; dualism, no. Neuroscience, 5, 195-206.

Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York: Norton.

Sutherland, S., & Scherl, D. (1970). Patterns of response among victims of rape. American Journal of Ortho-psychiatry, 40, 503-511.

Worden, J. W., & Sobel, H. J. (1978). Ego strength and psychosocial adaptation to cancer. Psychosomatic Medicine, 40, 585-591.

Wortman, C. B., & Bhehm, J. W. (1975). Responses to uncontrollable outcomes: An integration of reactance theory and the learned helplessness model. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology, (Vol. 8). New York: Academic Press.

Wylie, R. (1969). The self concept: Vol. 1 A review of methodological considerations and measuring instruments. Lincoln, Nebraska: University of Nebraska Press.